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Nursing & Midwifery Human Resources

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Abbreviations

ADN	Assistant Director of Nursing
ANC	Antenatal Care
ANM	Auxiliary Nurse Midwife
ANS	Assistant Nursing Superintendent
ANSWERS	Academy for Nursing Studies and Women's Empowerment Research Studies
AV	Audio Visual
B.Sc. (N)	Bachelor of Science in Nursing
CDMO	Chief District Medical Officer
CHC	Community Health Centre
CMO	Chief Medical Officer
CNE	Continuing Nursing Education
CNO	Chief Nursing Officer
DDN	Deputy Director of Nursing
DFW	Director of Family Welfare
DH	District Hospital
DHE	Diploma in Health Education
DHS	Director of Health Services
DME	Director of Medical Education
DN	Director of Nursing
DNEA	Diploma in Nursing Education and Administration
DNS	Deputy Nursing Superintendent
DPHN	District Public Health Nurse
FW	Family Welfare
GNM	General Nursing and Midwifery
GoI	Government of India
H&FW	Health and Family Welfare
HFWTC	Health and Family Welfare Training Centre
HPC	High Power Committee
IGNOU	Indira Gandhi National Open University
IMR	Infant Mortality Rate
INC	Indian Nursing Council
IPHS	Indian Public Health Standards
IUD	Intra Uterine Devices
JD	Joint Director
LCD	Liquid Crystal Display
LHV	Lady Head Visitor
LHVTC	Lady Health Visitor Training Centre
M.Sc. (N)	Master of Science in Nursing
MBA	Master of Business Administration
MCH	Maternal and Child Health
MMR	Maternal Mortality Rate
MoU	Memorandum of Understanding
NFHS	National Family Health Survey
NRHM	National Rural Health Mission
NS	Nursing Superintendent
ODA	Overseas Development Agency (UK)
ONC	Orissa Nursing Council
ONEA	Orissa Nurses Employee Association
ORV Act	Orissa Reservation Vacancy Act
P.B. B.Sc.	Post Basic Bachelor of Science
PHC	Primary Health Centre
PHN	Public Health Nurse
PNC	Postnatal Care
SHC	Sub-health centre
SDH	Sub-divisional Hospital
SN	Staff Nurse
SRS	Sample Registration System
TFR	Total Fertility Rate

Contents

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Dr. M. Prakasamma
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Executive Summary

The study on nursing human resources in Orissa State was conducted in 2008 by Academy of Nursing Studies on behalf of the NHSRC to identify gaps and draft recommendations for making quality public health services available in all health facilities and outreach areas through competent nurses and ANMs. The study incorporates an integrated research approach of qualitative and quantitative methods, with data collection at multiple levels.

Study methods and processes:
The major components of the study report are situation assessment, recommendations and Action Plan. The situation analysis includes -

- Primary data collection and analysis in health facilities and training institutions
- Review of secondary data for workforce availability and comparison with norms.
- Review and synthesis of discussions to formulate recommendations and action plan.

The primary data was collected from 4 District Hospitals, 8 CHCs, 10 PHCs, 27 SHCs and 3 hospitals in private sector as well as 3 nursing colleges, 7 GNM schools and 7 ANM schools. The research teams interviewed 103 staff nurses and 45 ANMs (regular & contractual), 45 teachers, 167 students and 10 senior officials. In addition, Focus Group Discussions were held with 20ANMs, 10 LHVs, 30 nurses, 10 teachers and 10 nurses having PG qualifications in nursing specialties. The key findings of the study are summarized below -

1. Numerical Inadequacies

The crucial finding of the study is that the Orissa State requires large number of additional nurses and nurse-midwives for the existing health facilities primarily due to non-availability of nursing educational institutions. The Orissa State has 39 ANM schools (India 584), 29 GNM schools (India 1,902), 12 Nursing colleges for B.Sc. (India 1,155) and only one Nursing college offering M. Sc. course (India 237). The Diploma course in Public Health Nursing was discontinued. The quality of nursing and midwifery services is also perceived to be low due to vacancies in supervisory posts. The existing training infrastructure is inadequate due to faculty shortages, space constraints and inadequacies in training materials & equipments, books, journals and faculty.

Category	Required
ANM	7,799
LHV	297
PHN	231
DPHN	50
Staff Nurse	10,669
Head Nurse	417
Asst. Matron	96
Matron	107
Faculty	57

2. Physical Infrastructure availability in rural areas

- At the SHCs < 50 % ANMs were conducting deliveries as 50% of SHC only had 24 hrs electricity / water supply and 4 of the 27 SHCs only had toilets.
- At the PHCs, 24 hrs water supplies is available in 20% of the PHCs, toilet facilities in 60%, labour room in 70%, Laboratory facilities in 60%, in-patient facilities 30% of PHCs visited. The drugs for minor ailments, cold chain including AD syringes are available in all the PHCs. However, all vaccines were available in 70% of PHCs, foetoscopes in 50% and delivery sets in 40%. Antenatal, postnatal and immunisation clinics are conducted in 80% of PHCs only as the others were established recently and in the process of strengthening the facilities for equipments and human resources.
- All the eight CHCs visited were functioning in own buildings with 24 hrs supply of electricity and water and linen supplies. The services of doctors are available round-the-clock in all CHCs. However, 24x7 services of nurses are available in six CHC and services of lab technician are available in three CHCs only. In the eight CHCs, obstetricians were available in seven, physicians in six and pediatricians in four CHCs. However, specialists in Anaesthesia were not available in any of the eight CHCs. Even though operation theatres are available in seven, the anaesthesia apparatus is available in two CHC only and blood bank in one only. Foetal dopplers are available in four CHC and Newborn care facilities are available in six CHCs.

3. Working environment

- Most of the ANMs could not carry-out their tasks due to inadequate infrastructure, irregular supplies and accommodation lacunae including such as irregular electricity and water supplies.
- Technical supervision of ANMs at SHCs and staff nurses at PHCs was inadequate due to vacancies in supervisory posts.
- The proportion of contractual staff to regular staff has been increasing.
- The private sector health facilities are mostly functioning with unqualified nurses and the nursing care is by girls and boys after in-house training of 1 - 3 or by pharmacists.

4. Workforce Policies

- Career pathways and cadres need to restructured for rationalisation and ensuring minimum of three time-bound promotions so as to enhance the Job satisfaction levels in nurses and ANM.
- Nursing management structure at the state and district levels need to be strengthened for participative decision making and professional development. Though written job descriptions are available, very few nurses are aware of these. There is no formal induction training.
- The services of in-service candidates possessing B.Sc. and M.sc. qualifications can be utilised as faculty in the teaching institutions and supervisory posts in large health facilities.

5. Nursing education

As per the Indian Nursing Council (2009), the Orissa State has 22 ANM Schools,28 GNM Schools and 1 Nursing Colleges. The Government sector has 15ANM schools, one LHV school, 5 GNM schools and one college of nursing (B.Sc., Post Basic B.Sc. & M.Sc.). In addition 7ANM schools, 23 GNM schools and 12 Nursing Colleges are available in private sector.

- Physical infrastructure in Government ANM and GNM schools is more often inadequate in terms of class rooms, chairs, tables, fans, teaching aids, hostel facilities including dining halls, toilets etc.,
- In the present faculty of 45 in government sector, 5 are postgraduates, 32 graduates and 8 diploma holders.
- Of the 165 students interviewed, 34 only conducted deliveries.

Recommendations

A. Address shortages

- All vacant posts of PHN, LHV, head nurse, matron and faculty to be filled on top priority basis to improve supervision.
- Identify available in-service candidates within and outside the state for recruitment as teachers should be done immediately.

B. Defined divisions for career progression :

Four divisions - General, Public Health, clinical specialization and Teaching.

C. Strengthen nursing management:

State level positions for strengthening the management of nursing & midwifery services.

D. Faculty Development:

A long term plan is required for ensuring a steady supply of faculty for all levels of teaching.

E. Strengthen State nursing council is essential for the qualitative education and training.

Action Plan

Strategy : A multi- pronged approach with consultative processes and implementation of three year action plan is proposed as detailed below -

1. Enhancing availability of ANMs and Nurses with diploma qualifications (GNM)

1.1 Constitute state level committee and appoint nodal persons at State and regional / district levels.

1.2 Prepare realistic estimates of ANMs and nurses required for all the existing and proposed health facilities and health programmes for the next five years.

1.3 Identify the institution wise gaps and prepare feasible time bound plans for minimising these gaps as immediate, short term and long term measures including the financial requirements.

1.4 Prepare detailed work plans (as per INC guidelines) and implement for the strengthening of existing and starting of new nursing & ANM training schools and colleges to enhance admission capacities.

1.4.1 Detailed assessment of all ANM and GNM schools in the Government sector for identifying deficiencies, listing additional facilities required and cost estimates for improving the physical infrastructure

1.4.2 Discussions with NGOs including Missionaries for enhancement of annual intake and quality in nursing & midwifery education.

1.4.3 Constitute a technical group of state/ district officials and NGOs for fulfilling the INC requirements of nursing & midwifery institutions in the private sector.

2. Faculty Availability

2.1 Immediate filling up of all vacancies in faculty positions by posting the available in-service candidates possessing DNEA, DPHN, B.Sc. (N), M.Sc. (N) qualifications.

2.2 Recruit additional faculty by regular appointment of candidates available in Orissa State and also by fixed tenure contractual appointment (100) from other states. These new appointees may need to undergo induction trainings for quality improvements.

2.3 Deputation of willing in-service candidates (110) for higher studies to other States -

20 for Diploma in nursing education and administration, 20 for Diploma in Public Health Nursing, 60 for Post Basic B.Sc. (N) and 10 for M..Sc. (N).

2.4 Increase admission capacities in the existing institutions providing Post Basic B.Sc., and B.Sc. and M.Sc. (Nursing) courses including IGNOU seats.

2.5 As a long term measure, establish two additional Nursing colleges each in Government and private sectors for B.Sc., Post Basic B.Sc. (Nursing) and DNEA courses

3. Capacity Building

3.1 Formulate State Nursing Policy including career paths for the four main streams in nursing and midwifery areas (clinical including specialties, public health and teaching)

3.2 Institutionalise management structures for capacity building.

3.3 Develop HR data base for nursing & midwifery.

3.4 Develop protocols for clinical and community nursing & midwifery experience for the students.

3.4 Strengthen the state nursing council as an autonomous agency with adequate support.

3.5 Implement accreditation system for training institutions to ensure qualitative teaching and conducting examinations.

Section - I : Background and Methodology

1.1. Demographic and health indicators:

The State of Orissa is located on the eastern coast of India with Andhra Pradesh in the south and west, Chattisgarh on the west and north and Bihar and West Bengal in the north. The area of 155707 sq. km consists of coastal plains, mountains, plateaus and uplands. The population of 3,68,04,660 (Census 2001) is predominantly rural with 98% of population residing in 51,349 villages in 30 districts. The population below poverty line is much higher and female literacy rate is 50.5. The demographic and health care outcomes are detailed in Table- I.

Table – I : Demography & Health Indicators - Orissa

	Indicator	Orissa	India
1	Population - Total - Census 2001 (millions)	36.7	1028.6
2	Below Poverty line Population (%)	47.2	26.1
3	Literacy Rate in Females - Census 2001 (%)	50.5	53.7
4	Sex Ratio (Census 2001)	972	933
5	Decadal Growth - Census 2001 (%)	16.3	21.5
5	Total Fertility Rate (SRS 2006)	2.6	2.9
6	Couple Protection Rate % (DLHS-3)	47	54.1
7	Crude Birth Rate (SRS 2007)	21.5	23.1
8	Crude Death Rate (SRS 2007)	9.2	7.4
9	Infant Mortality Rate (SRS 2007)	71	55
10	Maternal Mortality Ratio (SRS 2004-2006)	303	254
11	Institutional deliveries - % (DLHS-3)	44.3	47
12	Full Immunisation of children % (12-23 months) DLH-3	62.4	54.1

The lower decadal growth rate, crude birth rate and TFR in the Orissa State indicate the positive demographic transition. However, the high Infant and maternal mortality rates need to reduced. Besides, a much higher percentage of the population (47.15%) in Orissa is below the poverty line compared to the rest of the Country (26.10%). Female literacy rates are also lower than the national average.

The availability of health facilities and human resources are the critical factors for functioning of any health system and to achieve health goals. The rural infrastructure and human resources are detailed in Table-II. At present, there are 6688 SHCs, 1279 PHCs, and 231 CHCs in the Orissa State.

Table – II: Human Resources - Rural Orissa

		Required	In position	Shortfall
1	Nurse-midwife - PHC & CHCs	2896	637	2259
2	ANM / MPHW (Female) - SHCs & PHCs	7967	6768	1199
3	Health Worker / MPHW(Male) - SHCs	6688	3392	3296
4	L H V / Health Assistant (Female – PHCs)	1279	726	553
5	Health Assistant (Male) – PHCs	1279	168	1111
6	Doctor - PHCs	1279	1353	-
7	Radiographers – CHCs	231	8	223
8	Pharmacists - PHC & CHCs	1510	1984	-
9	Laboratory Technicians - PHC & CHCs	1510	311	1199

(Source: RHS Bulletin, March 2008, M/O Health & F.W., GOI)

In Orissa State the availability of nurses / midwifes, critical service provider at PHCs & CHCs, is of grave concern as 637 nurses are only available for the required 2,896 at the existing facilities. The availability of other essential paramedicals such as Lab Technicians is also minimal (311 available for the required 1510). There is an immediate need to focus on increasing the availability of all essential service providers.

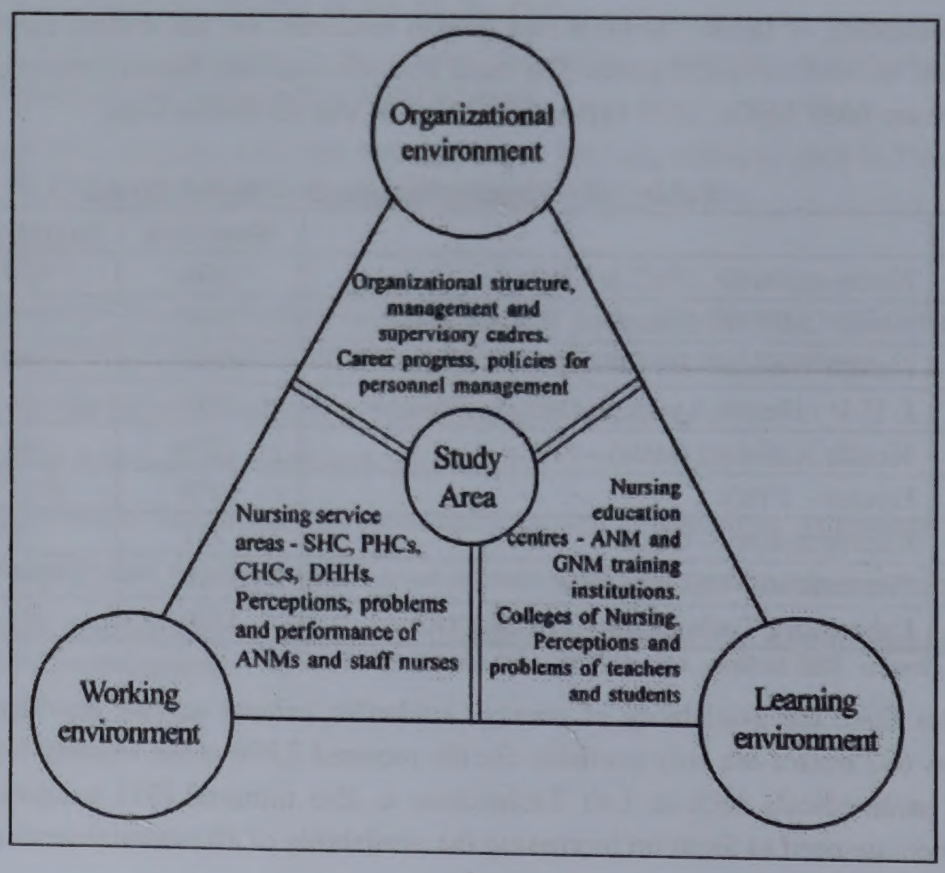
1.2 Objectives of study

This study was undertaken by the Academy for Nursing Studies and Women's Empowerment Research Studies) on behalf of the National Health Systems Resource Centre (NHSRC), National Rural Health Mission (NRHM), Government of India, with the objective of identifying gaps in nursing workforce and recommending alternative measures for addressing deficiencies. The set objectives of the study as detailed by the NHSRC are -

a. To review the organization of nursing and midwifery services in the state public health system.
b. To review the workforce management policies in place in the state public health system as relates to nursing and midwifery, including career progression, their working conditions in government as compared to private sectors, their reasons for discontinuing the profession, where this is the case.
c. To compare workforce management policies between contractual staff and regular staff and see the differing experience and utilization between them.
d. To assess the workforce performance and workforce conditions and to skills of the workforce.
e. To conduct situation analysis of nursing and midwifery services requirements of health centres and hospitals in public and private sectors, their current availability, within system and in open market.
f. To assess the current capacities (public and private sectors) of training institutions and feasibilities within the state to meet the short fall of nurses, ANMs and LHVs for the immediate needs as well as midterm and long term requirements, to also assess the requirements in terms of faculty development programmes, and quality assurance measures to ensure quality in nursing education.
g. To evaluate the different options available for expanding nursing and ANM and LHV education and the necessary conditions that would be needed to ensure that a substantial part of those trained in these institutions become available to serve within the public system or outside it in rural areas. This includes the important issue of the availability of faculty for running these schools.
h. To draw up a detailed project report for starting up of ANM and Nursing schools including tribal blocks/districts such that educated women resident in these areas are able to access ANM/ nursing education.

1.3. Methodology: The working, learning and organizational environment of nursing personnel in Orissa formed the framework of research methodology in the study as shown in Figure 1.

Figure - 1 : Study Themes



The research design selected for the study includes integrated quantitative and qualitative approach. The focus of the study was on nursing and midwifery personnel including clinical and public health nursing as well as teachers and students.

1.3.1. Sites and sample: The sample included four levels - service providers (ANMs & staff nurses), health care facilities, training institutions and officers at State & district levels as detailed in Table-III. The four districts of Bhadrak, Ganjam, Nabrangpur, and Sambhalpur were selected based on geographical location, size, availability of health facilities & training institutions.

Table - III. Facilities and personnel covered in the study

	Facilities	**68**
1	District Hospitals – one in each district	4
2	CHCs – two in each district	8
3	PHCs	10
4	SHCs	27
5	Colleges of nursing	5
6	GNM schools	6
7	ANM Schools	8
	Personnel	**438**
1	Staff Nurses	103
2	ANMs	45
3	Faculty - Nursing s	45
4	Students – Nursing	155
5	Officials - State level	10
6	Focus Group Discussions - State level	80

The study covered 4 district hospitals, 8 CHCs, 10 PHCs and 27 SHCs with interviews for 103 staff nurses and 45 ANMs and 10 State level officers. The study covered 5 colleges, 6 GNM schools and 8 ANM schools for assessment of capacities. A series of focus group discussions were held in government and private institutions for performance-related issues, working conditions and career progression. The participants in the FGDs included 20 ANMs, 10 LHVs, 30 nurses, 10 teachers, and 10 postgraduate nurses.

1.3.2. Tools and techniques for data collection: The semi-structured interview schedules and observation checklists formed the two main methods for primary data collection. The guidelines were prepared for conducting focus group discussions with different categories and for interviews with key stakeholders and officers. A series of workshops were conducted with experts at the Academy of Nursing Studies for the conceptualization, tool development, identifying gaps in primary data collection, revision of tools etc. The tools used for data collection with different groups and facilities are detailed in Table-IV. The secondary data were collected on organizational environment through review of policies, documents and official circulars and manuals.

Table - IV : Tools for Data Collection

	Level	Tools
1	State and Districts	Semi structured interview schedule for data on personnel, number and type of institutions, different programmes and policies related to nursing.
2	Training Institutes	Semi structured interview schedule and observation checklist for information on physical facilities, teaching facilities and living conditions
3	Health Facilities	Observation checklist for quality of facilities and working conditions
4	Service Providers	Interview schedules to assess working environment, conditions of work, performance and problems. Focus group discussion guideline for ANMs, LHVs, staff nurses, teachers and M.Sc. Nursing students.
5	Teachers & Students	Interview schedules for obtaining information.

1.3.3. Research Team:

The primary research team consisted of seven research assistants for the quantitative aspects and the consultant team of two senior nursing consultants after six weeks of starting data collection by the research team so as to build on from the questionnaires, interviews, focus group discussions and interviews with state level officers, senior nurses, and key stakeholders with focus on organizational environment. The data analysis report writing was done by a core team of coordinator, data manager and support person.

1.3.4. Data Collection:

The pilot study of the research design and tools was carried out in the last week of September 2008 in one district and two training institutions. The primary data collection was done over a period of eight weeks during October -December 2008. The secondary data was reviewed throughout the study period. The officials interviewed at State level included Registrar (Examination Board), Director of State Institute of Health & Family Welfare, Deputy Director (Nursing), Assistant Director (Nursing) and Consultant of NRHM (Training). At the district level, the Civil Surgeons, DPHNs and Nursing Superintendents were interviewed.

A common interview schedule was designed and used for all students – government or private. Students were questioned about their awareness of rotation plan, clinical posting, supervision and guidance, case record maintenance, adequacy of clinical teaching, and student satisfaction levels. The interview schedule for teachers consisted of questionnaire for assessing teachers' profile, career path, teaching quality, clinical teaching etc.

The data was collected from health facilities and staff in the selected districts. The district hospital, CHCs, PHCs and SHCs were visited. The tool assessed details regarding the residence and mode of transport to work, working conditions and working environment for nurses, availability of drugs, equipments, teaching aids, forms, charts, registers, electricity / water supply, labour room, operation theatre, precautions for infection prevention etc. as well as their satisfaction regarding pay, allowances.

The category wise institutions (ANM Schools, Nursing Schools and Nursing Colleges) were listed and 20% of the total institutions (Government and private) were selected for the study. Three types of tools were deployed for each institution – institutional checklist, interview schedule for teachers and interview schedule for students of final semester / year. The institutional assessment checklist covered adequacy of teachers, annual intake of students, selection criteria, availability of training facilities including physical infrastructure such as class rooms, nursing labs., accommodation, availability of areas / facilities for practical experience in community health and student welfare programmes.

1.3.5. Data Analysis and Development of Action Plan :

A team of data managers took up the task of analysis after obtaining data from different parts of the state for all categories. One person from the field was included in data management team to help in data verification, compilation and editing. Statistical Package for Social Sciences was used for data entry and analysis. A twin member team was deployed for data entries. The qualitative information was analyzed on the basis of major themes and sub themes. A structure was prepared for reporting of the findings and discussion. The additional data required was collected for accuracy of information to ensure more comprehensive outputs.

Section- II : Availability and Requirements

The nursing and midwifery personnel primarily work in two broad areas of clinical nursing and public health nursing. The standards vary considerably for these work areas as the needs, workload and working conditions differ grossly. Accordingly, the Indian Public Health Standards (2007), Guidelines of Indian Nursing Council (2002), Bajaj Committee recommendations and Government of India Guidelines (2006) were considered as detailed below in Tables - V and VI.

Table - V: Indian Public Health Standards (2007) - Non-Teaching Hospitals

	Type	ANM	LHV	Staff Nurse	PHN	Ward In-charge	Asst. Matron	Matron
1	SHC	2	-	-	-	-	-	-
2	PHC (6 beds)	1	1	3	-	-	-	-
3	CHC (30 beds)	1	-	7	1	-	-	-
4	Sub-district Hospital (31- 50 beds)	-	-	21	-	-	1	-
5	Sub-district Hospital (51 -100 beds)		-	51	-	4	1	1
6	District Hospital (101-200 beds)	-	-	88 to 113	-	5	1	1
7	District Hospital (201- 300 beds)	4	-	115	-	5	1	1
8	District Hospital (301- 500 beds)	4	-	217 to 267	-	6	2	1

Table - VI: Indian Nursing Council Norms (2002) - Teaching Hospitals

	Categories	Requirements
1	Nursing Superintendents	1: 200 beds
2	Deputy Nursing Superintendents	1: 300 beds
3	Nursing Supervisors / Sisters	7: 1000 + 1 per additional 100 beds
4	Ward Supervisors / Sisters	8: 200 + 30% leave reserve
5	Staff Nurses – Wards	1: 3 (1:9 per shift) + 30% leave reserve
6	Staff Nurses - OPD, Blood Bank, X-Ray etc	1: 100 out-patients + 30% leave reserve
7	Staff Nurses - ICU (8 beds)	1:1 (1:3 per shift) + 30% leave reserve
8	Staff Nurses – special areas- OT, Labour Room	8: 200 + 30% leave reserve

The following sections present data on availability of nursing personnel in different settings in Orissa and calculate the requirement and shortfall as per norms. Nursing personnel in all areas - public health nursing personnel, hospital based nurses and nursing teachers are covered. These calculations have not included the 30% leave reserve.

2.1 ANMs : As per the IPHS norms of two ANMs at SHC, one at PHC, one at CHC and four at the district hospital, the Orissa State requires 15,014 ANMs (13376 for SHCs, 1279 for PHCs, 231 for CHCs and 112 for district hospitals (201-300 beds) and 16 for district hospitals (301-500 beds). At present 7215 ANMs are available at these facilities with a shortage of 7799 (52%) as detailed in Table- VII.

Table -VII: ANMs - Available & IPHS Requirement

	Health Facility	Sanctioned	Available	Required	Shortfall
1	SHCs	6688	7215	6688 x 2=13376	7799 (52 %)
2	PHC (6 beds)	1279		1279 x 1= 1279	
3	CHC (30 beds)	231		23 x 1= 231	
4	District Hospital (201-300 beds)	28		28 x 4= 112	
5	District Hospital (301-500 beds)	4		4 x 4= 16	
	Total	8,230	7,215	15,014	7,799

2.2 Lady Health Visitors / Female Health Supervisor: The IPHS recommend one LHV for each PHC. In Orissa State, 982 LHVs are available for the 1279 PHCs and the shortfall is 297 (23%).

Table - VIII : LHVs - Available & IPHS Requirement

Health Facility	Required	Available	Shortfall
PHC	1279	982	297 (23%)

2.3. Public Health Nurses (PHNs): The IPHS recommend PHN at each CHC and regional training centre. In Orissa State three PHNs are only available at the three regional training institutions and none at CHCs.

Table - IX : PHNs - Available & IPHS Requirement

	Institution	Nos	Required	Available	Short fall
1	CHCs	231	1 x 231 = 231	0	231 (99%)
2	Regional Training Institute	3	1 x 3 = 3	3	

2.4. District Public Health Nurses (DPHNs): The availability of DPHNOs in the districts would strengthen supervision and monitoring of PHNs, LHVs and ANMs for improving the quality of services. In Orissa State, 16 DPHN posts were created over 20 years back and allocated one each for the then 16 districts. Subsequently no additional posts were created for the 14 new districts. The available 13 DPHNs are distributed to 10 districts and 3for the training institutions as detailed below -

Table - X : DPHNOs - Available & Required (High Power Committee –Nursing)

		Nos	Recommended*	Total	Available	Required
1	Districts	30	60	64	14	50 (78%)
2	Health & FW Training Centres	3	3			
3	Regional Training Institute	1	1			

2.5. Staff Nurses: The IPHS recommends availability of 3 nurses at PHC for 24x7 services, 7 at CHC and 51 to 264 nurses at the hospitals (51-500 beds). As per these standards, the State would require 12,688 nurses and presently 2,979 are only available i.e. shortfall of 12,688 (73%). In addition, the 1504 nurses are required for the three hospitals attached to the medical colleges as per the INC norms and presently 544 nurses are only available at these three hospitals. The requirement of nurses for Government facilities alone is 10,669 as detailed below -

Table - XI Staff Nurses - PHCs, CHCs & Hospitals

	Facility	Nos.	Required		Available	Shortfall
1	PHCs (6 beds)	1279	1279 x 3 = 3837	12688	2979	9709 (73%)
2	CHCs (30 beds)	231	231 x 7 = 1617			
3	Sub-district Hospitals (51-100 beds)	58	58 x 51=2958			
4	District Hospitals (201-300 beds)	28	28 x115 =3220			
5	District Hospitals (301-500 beds)	4	4x264 =1056			
6	Medical College- Berhampur (850 beds)	1	457	1504	544	960 (64%)
7	Medical College - Burla (750 beds)	1	403			
8	Medical College - Cuttack (1200 beds)	1	644			
	Total	**1603**		**14192**	**3523**	**10669** (75%)

2.6. Head Nurses: The State has 28 hospitals of 201-300 beds and 4 hospitals of 301-500 beds (Bhubaneswar Capital Hospital, Khurda, Rourkela and Sundargarh). The State would require additional 58 sub-district hospitals as per the IPHS norm of 300 beds per 10 lakh population in a district. These 28 district hospitals and additional 58 sub-district hospitals (51-100 beds) need to be provided with five ward in-charge nurses as per IPHS norms. In consideration of the Indian Nursing Council guidelines for the teaching hospitals, the requirements of head nurses for the three medical college hospitals would be 145. The Orissa State has 182 head nurses for the required 599 with a shortfall 417 (70%) as detailed in Table XII.

Table – XII: Head Nurses required as per IPHS & INC #

		Required IPHS/ INC	Total	Available	Shortfall
1	Sub-district Hospitals (51-100 beds)	5 x 58 = 290	454	100	354 (78 %)
2	District Hospitals (201-300 beds)	5 x 28 = 140			
3	District Hospitals (301-500 beds)	6 x 4 = 24			
4	Medical College - Burla (750 beds)	39 #	145	82	63 (45 %)
5	Medical College- Berhampur (850 beds)	44 #			
6	Medical College - Cuttack (1200 beds)	62 #			
	Total	599	**599**	**182**	**417**(70%)

2.7. Assistant Matrons: As per IPHS norms, one assistant matron is required in each hospital with 201-300 beds, two and one additional assistant matron for every additional 50 beds in hospitals with 301-500 beds. The requirements as detailed in Table-XIII, includes 32 for medical college hospitals and 94 for other hospitals. At present, 30 assistant matrons are only available in the State with a shortage of 96 (76%).

Table - XIII: Assistant Matrons required as per IPHS & INC #

Institution (Beds)		Nos	Required	Total	Available	Shortfall
Sub-district Hospitals	(51-100 beds)	58	58	94	30	96 (76%)
District Hospitals	(201-300 beds)	28	28			
District Hospitals	(301-500 beds)	4	8			
Medical College - Burla	(750 beds)	1	7 #	32		
Medical College- Berhampur	(850 beds)	1	9 #			
Medical College - Cuttack	(1200 beds)	1	16 #			
	Total	93	126	126	30	96

2.8. Matrons, Chief Matrons & Nursing Superintendents/ Deputy/Asst. for teaching hospitals: The IPHS advocated one Matron for the hospitals with 51-200 beds, 7 Matrons for hospitals of 201-300 beds & and 9 Matrons for hospitals of 301-500 beds. For teaching hospitals, the Indian Nursing Council recommend one Nursing Superintendent (min.150 beds), one Deputy Nursing Superintendent and two Assistant Nursing superintendents with one additional Assistant Nursing Superintendent for every additional 50 beds. As per the above norms, the three medical colleges would require 17 and 5 are presently available. The State would require 112 nursing managers in the hospitals and there is a shortage of 107 (96%).

Table-XIV: Matrons, Chief Matrons (IPHS) & Nursing Superintendents/ Dy N.S./Asst. N.S. (INC)

Institution (Beds)		Nos	Required	Available	Shortfall
Sub-district Hospitals	(51-100 beds)	58	58	0	58
District Hospitals	(201-300 beds)	28	28	0	28
District Hospitals	(301-500 beds)	4	4	0	4
Medical College - Burla	(750 beds)	1	6	5	17
Medical College- Berhampur	(850 beds)	1	7		
Medical College - Cuttack	(1200 beds)	1	9		
	Total	93	112	5	107 (96%)

2.9 Faculty for ANM, LHV & Nursing Schools : The Faculty shortages continue to be a major constraint. The availability and shortfalls of teaching faculty for existing ANM, GNM and LHV training institutions are detailed in Table -15 and additional faculty would be required for the new institutions.

Table- XV: Faculty - ANM, LHV & GNM Schools

	Category	Required	Available	Shortfall
1	Principal	20	17+1*	2
2	Vice Principal	3	Nil	3
3	Nursing Tutor	64+2+48 = 114 **	64+3+21=88	26
4	Additional tutor	3	-	3
	Total	**140**	**106**	**34** (42%)

** LHV school* *** ANMTC (32), LHVTC (2), Nursing Schools (54)*

2.10 Faculty for Nursing College: The lone nursing college at Berhampur in the State is providing the B.Sc., Post Basic B.Sc., and M.Sc. courses for nurses. The B.Sc. (Nursing) of IGNOU through distance education is also available at this college. The faculty shortages has been a major issue since its establishment in 1983 and presently two of the M.Sc. faculty have M.Sc. qualification as the third incumbent was posted out. During 2009, five additional clinical instructors were posted. The faculty availability are as detailed below in Table XVI.

Table XVI. Faculty - Nursing College (INC norms)

		Required	Available	Shortfall
1	Principal	1	1	Nil
2	Vice Principal	1	-	1
3	Reader	3	-	3
4	Lecturer	6	1	5
5	Clinical Instructor	20	6	14
	Total	31	8	23 (72%)

** Annual intake – B.Sc. (N) – 50 or less; Post Basic B.Sc. – 30 or less & M.Sc. (N) – 10 or less*

At present the College is conducting four courses with only two full time faculty, six clinical instructors and one principal. The existing faculty of the College is also extremely inadequate as per INC norms. The College has only three out of the 32 faculty required. The College is to be provided with one vice principal, four readers, six lecturers and 12 clinical instructors for the present annual intake of students for the four courses. The total requirements of the nursing and midwifery personnel as detailed earlier can only be fulfilled by establishing additional schools and colleges. There is an immediate need to provide 48 additional teachers for the existing ANM and Nursing Schools as well as 23 teachers at the college level.

Section – III : Workforce Policies & Working Environment

This section deals with a range of issues related to workforce policies, cadre description, career progression and the working environment of nursing personnel that affect their performance. The data and analysis are based on primary source, secondary source and review of documents at various levels. The finding are compiled as eight relevant areas of -

3.1 Nursing posts and recruitment
3.2 Working environment: Facilities and performance
3.3 Work related problems of ANMs and staff nurses
3.4 Workforce policies: Perceptions of nurses
3.5 Nursing personnel on contract
3.6 Career progression
3.7 Management and administration of nursing services
3.8 Nursing in private sector

3.1 Nursing Posts and Recruitment

The nursing posts were last notified in the year 1993 vide Govt. health &F.W Dept letter no: 23830/4, dated 24-6-93. The district cadre posts were formalized in 1998. The nursing posts in the State are in categorized as staff nurses, nursing sisters, matrons, chief matrons, ANMs, LHVs and DPHNOs. The posts of sister tutors and PHN tutors are available in teaching institutions and in health facilities. The PHN posts are not available even though the very first course started in Berhampur nursing College was public health nursing. A total of 121 nurses acquired PHN qualification till the time of discontinuing the course in 1999. The Nursing posts available in class I, II and III are very few.

Table- XVII: Nursing Posts in Orissa

Class	Category	Posts (Nos)	Remarks
I	Deputy Director Nursing -1 Principal College of Nursing -1 Chief Matron – 3	5	Principal, College of Nursing is holding the post of deputy director as additional charge
II	Chief Nursing Officer -5 Matron - 30 Assistant Matron - 30 Assistant Director Nursing - 1 DPHNOs - 14 Principal SON / ANMTC - 18 Lecturer and Reader – 2 Registrar - 1 Secretary examination board -1	102	These incumbents rarely participate in policy making processes.
III	Head Nurses - 182 Staff Nurses – 3523 LHV - 982 PHN – 3 Clinical instructor – 6 Nursing tutors – 88 ANM – 7215	11,999	Perform the roles for ensuring services and supervision.

On joining the Government service, all the new appointees are assigned the relevant duties for on hands learning of responsibilities through informal instructions by the supervisors and there are no formal induction trainings. The written job descriptions for various posts are available however, most of the nurses are unaware of their job descriptions.

The State government has abolished several posts in various categories such as clinical instructor, drivers, librarian and 83 vacant posts of staff nurses during 2007. In view of the essentiality of nurses for patient care, contractual appointments were made for nurses and few tutors were posted as DPHNOs.

Recruitment: All recruitments are as per the Government policies and recruitment processes.

1. All the vacancies are advertised in widely circulated news papers with clearly indicating the reservations for various categories.
2. The recruitment committees are chaired by the respective CDMO/ CMOs/ Superintendent of medical college. The other members of selection committee are appointed by the district collector in consultation with the chairman of the selection committee..
3. The candidates from the district are given priority for appointments and for the remaining vacancies applicants from other districts are considered as separate lists are prepared for each category.
4. The contract appointments are decentralized to the district levels The applicants are required to report on scheduled dates and appointment orders issued if found suitable. The contractual appointments are limited to the respective district and transferred to other districts in exceptional circumstances.

Reservation: Orissa Reservation Vacancy Act is implemented for recruitments & Student admissions.

- Reservation for student admissions are: SC (16%), ST (22%), Physically handicapped (3%), Green Card holders (3%), Ex-servicemen (3%) and Male candidates (10% since 2008). The students passing out from Government schools are absorbed in the Government service.
- The Nurses are required to furnish certificates of qualifications and nursing council registration. The recruitments are based on merit and on advertisement of vacancies.
- The reservation policy is followed for the in-service candidates in allocation of seats for each category as General (40%), SC (20%), ST (20%) and Backward Classes (20%).
- There are no job reservations and additional increments for graduate nurses as in the neighbouring States. Many of the graduate nurses have left the government service to work in private sector or outside the State due to minimal remuneration and working conditions. The graduate nurses need to encouraged to join Government service to minimize the faculty shortages.
- The faculty recruitments are done as per the criteria of Indian Nursing Council.
- LHVs get one additional increment after higher education and no promotion after 15 years.
- Recently two increments were sanctioned on appointment with Post Basic B.Sc. (N).
- Eligibility and marks for post of Clinical Instructor

3.2 Working environment: The research team visited four districts for assessing the working environment of nursing and midwifery personnel at the health centres and hospitals. The team members interacted with nursing and midwifery personnel as well as concerned officials. The findings at facilities are detailed in annexure-2.

3.2.1 SHCs: The research team visited 27 of SHCs located in the four districts - seven in Bhadrak, nine in Ganjam, five in Nabrangpur and six in Sambhalpur.

The ANMs are to reside in the SHC quarters and provide services to about 5000 population. All the 27 SHCs visited are located in the villages. 33% of SHCs are having electricity and 25% are having 24hrs water supply. Only four had toilet for the patients. Telephone was available in one SHC. Most of the SHCs are functioning in dilapidated buildings.

Figure 2 – SHC- ANM using two rooms as residence and one room as SHC. Deliveries are conducted. No water telephone available.

The facilities for antenatal assessment and immunization services were adequate in all the SHCs. Most of the SHCs had drugs for minor ailments, IFA tablets and inj. TT, vaccine carriers, disposable syringes, immunization cards, registers, AD syringes, thermometer, adult & child weighing machines, stethoscopes, blood pressure apparatus and foetoscopes. Many SHCs did not have the other essential items such as baby resuscitation kit (only four SHCs) and mucus suckers (only 13SHCs), gloves (12 SHCs only), none had AMBU bag, only five had 100 watt lamp for baby warming. Instrument sterilizer was available in 10 SHCs only. The emergency drugs such as misoprostol, methergin, magnesium sulphate, were available in 13 SHCs only and I.V fluids were available in six SHCs only. None of the SHCs are provided with linen supplies. The aseptic furniture were mostly inadequate as seven SHCs are only provided with delivery tables. The non-availability of life saving drugs and equipment hindered the first-aid care and emergency care. The storage and maintenance seems to be a major problem as more often the supplies are to be left on the floor or kept hazardously. Color coded bins for biomedical waste management are available in four of the 27 SHCs only. Disinfectant was available in adequate amount in 20 SHCs.

All the ANMs were conducting antenatal clinics and immunization sessions and registering vital events. Macintosh sheets are available in two SHCs only. The delivery sets were available in 13 SHCs and all the ANMs of these 13 SHC are conducting deliveries usually in homes and none of them were plotting the partograph. Twenty one of the ANMs reported providing IUD insertion service to women who needed it and almost all reported that they were referring high risk cases.

Overall, ANMs were providing basic maternal and child health services at the SHCs even though facilities including instruments and equipment were inadequate. The ANMs were providing services on an adhoc basis rather than following a systematic plan. Lack of adequate facilities, irregular monitoring and absence of supportive supervision were the major factors contributing to poor performance in SHCs according to responses in FGDs and interviews.

3.2.2. PHCs: In the 10 PHCs visited, telephone was available in all PHCs, 24 hrs water supply was available in two PHCs only and two PHCs only had generators even though the electrical supply was irregular, six PHCs only had functioning toilets. Only half of the 10 PHCs visited were providing round the clock services. Beds were available in only three PHCs. Doctors were available in only six PHCs. Eight out of ten PHCs were conducting antenatal, postnatal and immunization clinics. IUD insertion was being done in eight out of 10 PHCs. Pharmacists were assessing patients and dispensing drugs.

Exclusive labour room was available in seven PHCs and operation theatre was available in five PHCs. Laboratory facilitates were available in six PHCs. The delivery tables were available in nine of the 10 PHCs but the quality as well as utilization varied considerably. Some of the new Labour tables were not used and the old are rusted. Only four PHCs had adequate number of delivery sets. Thermometer and stethoscopes were available in eight PHCs, blood pressure apparatus and fetal doppler were available in all the PHCs. Adult weighing machine was available in nine PHCs, but child weighing machine was available in only six centres. Foetoscopes was found in only five out of ten PHCs. Essential items such as 100 watt lamp, mucus sucker, suction apparatus, and oxygen cylinder with key were found only in four PHCs. AMBU bag was available only in two centres. Boyle's apparatus and instruments for tubectomy operations were available in one centre though five PHCs had operation theatres. On the other hand, suturing materials were found in all 10 centres. IUD insertion instruments were available in eight of 10 centres. ILR/ deep freezer/cold box were available in nine of the ten PHCs.

Drugs, I.V. fluids, AD syringe etc were available in adequate quantities in all the PHCs. The emergency drugs such as misoprostol, methergin, and magnesium sulphate were available in seven PHCs only and vaccine supplies are irregular. Drugs for post exposure prophylaxis of HIV were available in three PHCs only. Health education materials such as posters, flip charts were available in eight PHCs. Temperature charts were available in two PHCs only. Color coded bins, mackintosh and adequate stocks of gloves were available in four PHCs only. Adequate stocks of line were available in 50 % of PHCs only. Sterilizer and adequate disinfectant were available in seven out of ten centres.

3.2.3 CHCs: The research team visited eight CHCs in four districts and all of them are providing 24 x7 services with 24 hrs electricity and water supply. All of them have staff quarters. Toilet facilities are adequately available in the wards. The generator and telephone facilities were available in four CHCs. Health education activities are implemented in three CHCs with provision of television. All the CHCs were conducting normal deliveries, antenatal and postnatal clinics and immunization clinics. Six of the eight CHCs were performing IUD insertions.

The basic items such as BP apparatus, stethoscope, adult & child weighing machines were available in all CHCs. Central oxygen supply were available in two and blood bank was available in one CHC only. Foetal doppler was available in four CHCs. All CHCs had separate labour rooms and Operation theatre facilities in seven CHC but Boyle's anaesthesia apparatus was available in two only. Exclusive baby resuscitation rooms were available in half of the CHCs. Delivery sets were not available in one CHC and tubectomy instruments not available in two CHCs. Suture materials for episiotomy deliveries were available in all CHCs. Six of the eight CHCs had instruments for LUCS or forceps delivery. None of the CHCs had vacuum extractor.

Adequate staff nurses for 24/7 services were available in only six out of eight CHCs. Lab technicians was available only in three CHCs though round the clock laboratory was present was six CHCs. Obstetricians were available in seven CHCs, physicians were available in six CHCs and pediatricians were available in four CHCs. However, anesthetist was not available in any of the CHCs.

All CHCs had adequate supply of drugs, ILR / deep freezer, AD syringes. However, three did not have adequate vaccines were not available in three CHCs. Inj.TT was not available in two CHCs and PEP drugs were available in three CHCs. All CHCs had adequate supplies of linen and gloves. Six of the eight CHCs had color coded bins for biomedical waste management, and sterilizer for autoclaving. Only half of CHCs had adequate disinfectant supply. Partograph plotting was observed in only one of the eight CHCs. for eligible couples. Temperature charts were not available in eight CHCs. Six CHCs had health teaching material and AV aids.

3.2. 4. Case study of Bhatakamarada CHC :

Bhatakamarada CHC in Purosattampur block is an old CHC with 16 beds. Budget was sanctioned for a new building but work had not yet started at the time of visit. The CHC is functioning with a doctor, staff nurse, ANM and pharmacist. The case load was about 150 outpatients per day and 20 deliveries per month besides emergency cases. The pharmacist also helps in patient care activities such as IV fluids for diarrhoea patients.

The labour room had two old tables and lacks proper hygiene. The table was rusted, mackintosh was torn and there were blood stains on the table and floor. There were very few instruments. The staff nurse boiled instruments in a rusted enamel tray for delivery and episiotomy suturing. The staff nurse is residing in the quarters and attending delivery cases at the CHC and also home deliveries. The physical facilities and manpower at the CHC are inadequate and there is no support and guidance. The demotivation leads to lack of commitment for clean environment and quality care.

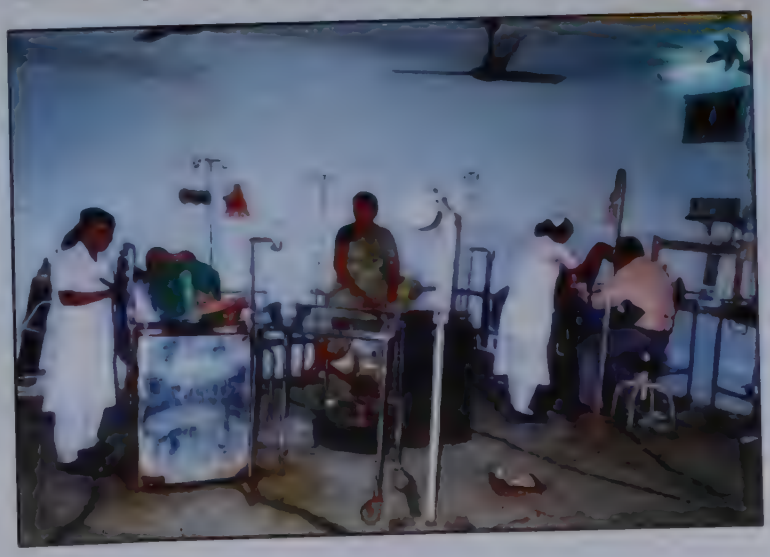
3.2.5. District Hospitals: The teams visited four district hospitals at Bhadrak, Ganjam, Nabrangpur and Sambhalpur. All the four district hospitals had casualty and laboratory facilities for rendering 24x7 services. Three out of four hospitals had blood bank. Two of the four hospitals had separate emergency operation theatre. All four hospitals had separate post-operative ward, operation theatre and VCTC. All district hospitals had facility for providing drugs, equipment and supplies through central stores. Sterilization department and central oxygen were available in all the four district hospitals.

All the hospitals had separate maternity units with labour room, antenatal and postnatal ward and antenatal and postnatal OPD. Baby resuscitation sets were available in three hospitals and baby intubation sets were available in only two of the four district hospitals. Though labour tables were available in all four district hospitals, the number was not adequate and they were badly maintained. Facilities for new born care, especially for sick and premature babies were present only in two district hospitals. Baby resuscitation room was available in only one district hospital. Critical life saving equipment like baby AMBU bag, open radiant warmer, oxygen cylinder with key were found in all four district hospitals. But some of these were not in working condition. General equipment like BP apparatus, stethoscope, weighing machine were available in all the four hospitals. Foetal doppler was not available in any hospital. Instruments related to MCH services and normal delivery were available in all hospitals but were inadequate. The PEP drugs (Post Exposure Prophylaxis to HIV infection) were available only in one district hospital.

Though all the hospitals were providing 24x7 services, facilities for special investigations were not available in any of the district hospitals. Out of four, three had USG facilities but none had CT scan. All district hospitals had ambulance for referring the patients to teaching institutions. One district hospital at Nabarangpur had no phone facility. Intercom was available in only one hospital. PCO for patients and their relatives was available in only one hospital. Records and registers were available and maintained in all four district hospitals. Audio visual aids for health education were available in two of the four district hospitals.

The CSSD facilities were available in all the hospitals. Hub cutters and disinfectants were available in three hospitals and color coded bins for bio-medical waste management were available in two only.

Staff nurses were available round the clock in all four district hospitals but the staff nurses were inadequate for the workload at the CHC. For example in Bhadrak district hospital 34 staff nurses were available for providing care round the clock in a hospital with 121 beds. According to IPHS norms there should be 88 staff nurses (75 for general, 9 for OT and 4 for blood bank / storage = 88) in this hospital. Only one ANM was working in Bhadrak district hospital whereas IPHS recommend four ANMs. Staff nurses were conducting normal deliveries, antenatal and postnatal clinics,



immunization clinics, and maintaining records and registers in all the four district hospitals. Partograph was being plotted in only one district hospital. Nursing Supervisors were available in two hospitals. Lab technicians were available in all four district hospitals. Pharmacists were managing the store in the hospital.

Overall, the study showed that there are many gaps in facilities and equipment and their quality at peripheral centres. The bigger the facility, the more adequate and equipments and facilities but staff were extremely inadequate. In most places, emergency equipment drugs and personnel were inadequate. For example, though seven CHCs had obstetricians and four had pediatricians, none had anesthetists. Nursing personnel were inadequate at all levels - PHCs, CHCs and district hospital.

3.3. Work related issues: The research team interviewed 45 ANMs and 103 staff nurses in the four districts. The mean age of ANMs was 40 years and of staff nurses was 37 years. Majority of them had educational qualifications higher than the minimal requirements. Three ANMs and 22 staff nurses were graduates. Majority of the ANMs and staff nurses were married as detailed in Table XVIII.

Table-XVIII: Age, Marital status & Education Status of ANMs & Staff Nurses

	Category	Characteristics	ANM n=45	SN n=103
1	Age	Less than 30 years	4	29
		31-40 years	19	38
		More than 40 years	22	36
2	Marital Status	Married	39	80
		Unmarried	6	23
3	General education	Less than 10th class	3	1
		10th class	27	14
		Intermediate	12	66
		Graduate and above	3	22

The staff nurses and ANMs were requested to comment on their work and influencing factors. Only 7 of the 45 ANMs and 2 of the 103 staff nurses knew about written job descriptions. 14 out of 45 ANMs and 24 out of 103 staff nurses were aware about the duty rosters. 3 of the 45 ANMs and 2 of the 103 staff nurses had written protocols for management of emergency conditions in maternal and newborn care.

Two third of the nursing personnel stated that the equipments and supplies are adequate, and over 50% of them expressed that these were not in working condition. The supply of essential drugs was a problem at PHCs as 63 out of 103 staff nurses stated that the essential drugs are inadequate. However at SHCs it is better as 33 of the 45 ANMs stated that the essential drugs were adequate.

Most of the ANMs stated that communications with higher facilities is a major issue as phone facilities were not available at work place. 18 ANMs and 55 staff nurses were satisfied with the safety aspects at their work place. The supply of materials and documentation facilities were expressed to be adequate by 26 ANMs. Further, 29 of the 45 ANMs and 69 of the 103 staff nurses stated that the supportive staff provided were inadequate.

Most of the ANMs received in-service education through RCH II and NRHM and one third of the (38 out of 103) staff nurses received in-service education for their professional development. 4 of the 45 ANMs and all the 12 staff nurses expressed their satisfaction with their pay and allowances.

Most of the ANMs received in-service trainings under RCH-II and NRHM programmes. In contrast 38 of the 103 nurses (33%) received in-service trainings.

3.4 Workforce Policies - Staff Perceptions

The research team conducted focus group discussions and held workshops with different categories of nursing personnel. A total of 80 nurses participated in five FGDs and workshops. In addition 10 state and district level officers were interviewed. A summary of the findings related to workforce policies, practices and problems is given below under the main themes of the discussion.

Promotions

- Staff nurses mentioned that there was no promotion even after 33 years of service for general candidates.
- ANMs were not keen to undergo LHV trainings as the promotions are unduly delayed. The Government policy stipulates completion of 10 years service as ANM and 5 years after LHV training.
- The non filling up of faculty vacancies was the major concern for the tutors.

Continuing Education

- The staff nurses are not deputed regularly for continuation education like workshops and seminars to update their knowledge and provide specialized bedside nursing care. Staff nurses were keen to be computer literates. There is no access to book and journals. There are no opportunities for B.Sc.

Supervision

- Staff nurses mentioned that ward sisters supervised them only about ward activities but "they don't provide any extra information related to patient care etc...."
- ANMs said that they don't get any guidance or counseling from superiors at the time of crises or emergency situation - either technical or personal.

Security & Privacy

- Staff nurses and ANMs expressed concerns on security issues even in hospitals as security are posted at main entrance only. The security is much better in private sector and teaching hospitals.
- The lack of change rooms is yet another major concern for nurses working in hospitals
- The lack of water and electricity at the SHC is the major concern for ANMs.

Supplies

- Staff nurses expressed that Sterilization procedures are not followed due to lack of supplies and other problems including non availability of alternate measures such as boiler, pressure cooker etc.
- Equipments and supplies were inadequate and irregular

Facilities in Training Institutions

- DPHNOs said that there was no separate office room for them, no phone facility, no separate clerk even though they are responsible for the district. They have to work in non supportive environment. They felt that government can provide two-wheeler to LHV and ANM and vehicle to DPHNOs.
- Office room for nursing officers only has intercom phone, and few chairs, table and almarah. No computer or internet facility is provided.
- In teaching hospitals there is no separate classroom with facilities to teach the students during clinical experience. Teachers do not have place in clinical areas, for classes and case discussions.
- Nurse-patient ratio is not maintained, overloaded with work and unable to render need based care to the patients. They have more written work than nursing care to patients.

Grievances and conflict resolutions:

Most of the staff nurses said they were unaware of service rules and grievance redressal mechanisms. The staff are aware but reluctant to utilise the explicit opportunity to meet the health secretary on the Grievance day and inform the instances of work place harassment. The grievances expressed by nursing personnel include nonpayment of washing allowance, Inadequacies / non-provision of quarters, canteen facilities in hospitals, , crèche, transport, rest rooms and free medical care and investigation facilities as they too have to remit user fees.

3.5. Contractual Services

In Orissa contractual appointment of staff nurses and ANMs started in June 2003 under RCH programme and 846 staff nurses are presently on contract. In 2005, the government reviewed the vacancy position in all paramedical posts and ordered to fill-up these posts on contractual basis. Observations and responses indicated that contractual staff performed better, punctual, regular in duties and willing to stay late. Interaction with patients showed that the contractual nurses were more easily accessible. Interviews with contractual staff (34 staff nurses and 4 ANMs) and focus group discussions with nurses revealed their problems. The contractual nurses desired regular appointments and monthly disbursements of salaries.

Table- XIX : Regular and Contractual Staff

Areas	Regular Nurses	Contractual Nurses
Duties, shifts and workload	Posted mainly in the morning shift and night shift. Take on writing and supervisory tasks	Mainly posted in the evening and night shift. Usually assigned to carry out difficult tasks, but not responsible tasks.
Salary & allowances	Staff Nurse - Basic Rs.5, 500 (on appointment Rs.10,000 per month approximate) Eligible for Quarters /room rent. Eligible for TA and other allowances as per rules	Nurse - Consolidated pay Rs.4500+additional Rs.1500 at district headquarters and Rs.2000 for those outside district. ANM - 5,400 per month. TA and risk allowances are not provided. Dress allowance of Rs.2500 per year. Accommodation not provided
Promotions and higher education	Last promotions were in 1994. In-service educational facilities available. Eligible for study leave.	The contractual employee works with the hope that she will become regular. No educational leave or pay.
Grievances	1.No promotion for many years 2.Pay scales low 3.Lack of in service education 4.Heavy workload and no support 5.Inadequate equipment and supplies	1. Heavy workload 2. Being dominated by regular staff Job insecurity. No safety and security. 3. Not satisfied with consolidated salary 4. Inadequate equipment and supplies
Knowledge and skills	More skilled and confident as they were working in the same environment for very long period	Possess basic skills but are not confident. Hand on learning and improving skills with help of regular staff.
Patient satisfaction	Handling more patients and do not have time for each patient. They shout at patients and so the patients were not satisfied. Lack of supplies affects patient care. Usually very strict with visitors and patient relatives approach them with fear	As they were new, they are very polite and give maximum care to patient. So the patients like their support and care. Patients and relatives approach them as they are new and were willing to listen and explain things. They have to spend time on this.
Chain of communication and reporting	Supervision of subordinates, maintaining registers, reporting and attending rounds with the doctors.	Carry out orders of the regular staff nurses as they are seniors. Most of the time they are given hard work.
Leave	Eligible for all leaves as per rules. Maternity leave - 3 months Casual leave - 15 days, Earned leave -33 days & 5 days off in a month	Maternity leave - 3 months Casual leave - 12 days 5 days off in a month

One needs to weigh the benefits of performance against the disadvantage and inequities of low pay, heavy workload and threat of termination and the consequent human suffering. Contractual staff joined due to lack of other options. During interviews, it was revealed that some of them were afraid to reveal problems because they are on contract. It is necessary to ensure that no individual is threatened or exploited due to vulnerabilities related to economic hardship, unemployment and gender.

3.6. Career Progression

The two entry level posts for nursing and midwifery personnel are ANM and staff nurse. The ANM completes her professional education at an average age of 19 years and the staff nurse at 21 years of age. However, nearly half of the ANMs and quarter of the nurses interviewed, have acquired higher qualifications than the minimum professional qualifications for recruitment. The ANMs' career ends as a Female Health Supervisor after 20 years of service as ANM. The staff nurses' career usually ends as a head nurse, which she gets after 24-25 years as a staff nurse. A staff nurse however has opportunity to become a tutor if she completes post basic B.Sc. (N) or Diploma in PHN.

3.6.1. ANM: There are 7215 ANMs in Orissa and 982 posts of LHV. Therefore only 13.6% ANMs have the chance to become a LHV at any one time if they complete LHV course. There is only one LHV training centre. ANMs are given opportunity to undergo LHV training after 5 years of experience as ANMs. At present those who have passed the LHV course are not getting immediate promotion as the promotions are after 20 years of service. There is no scope for the ANM to undergo bridge course to become nurses. The second promotional posts of PHN were not created in Orissa.

Figure 2. Career Paths - ANMs

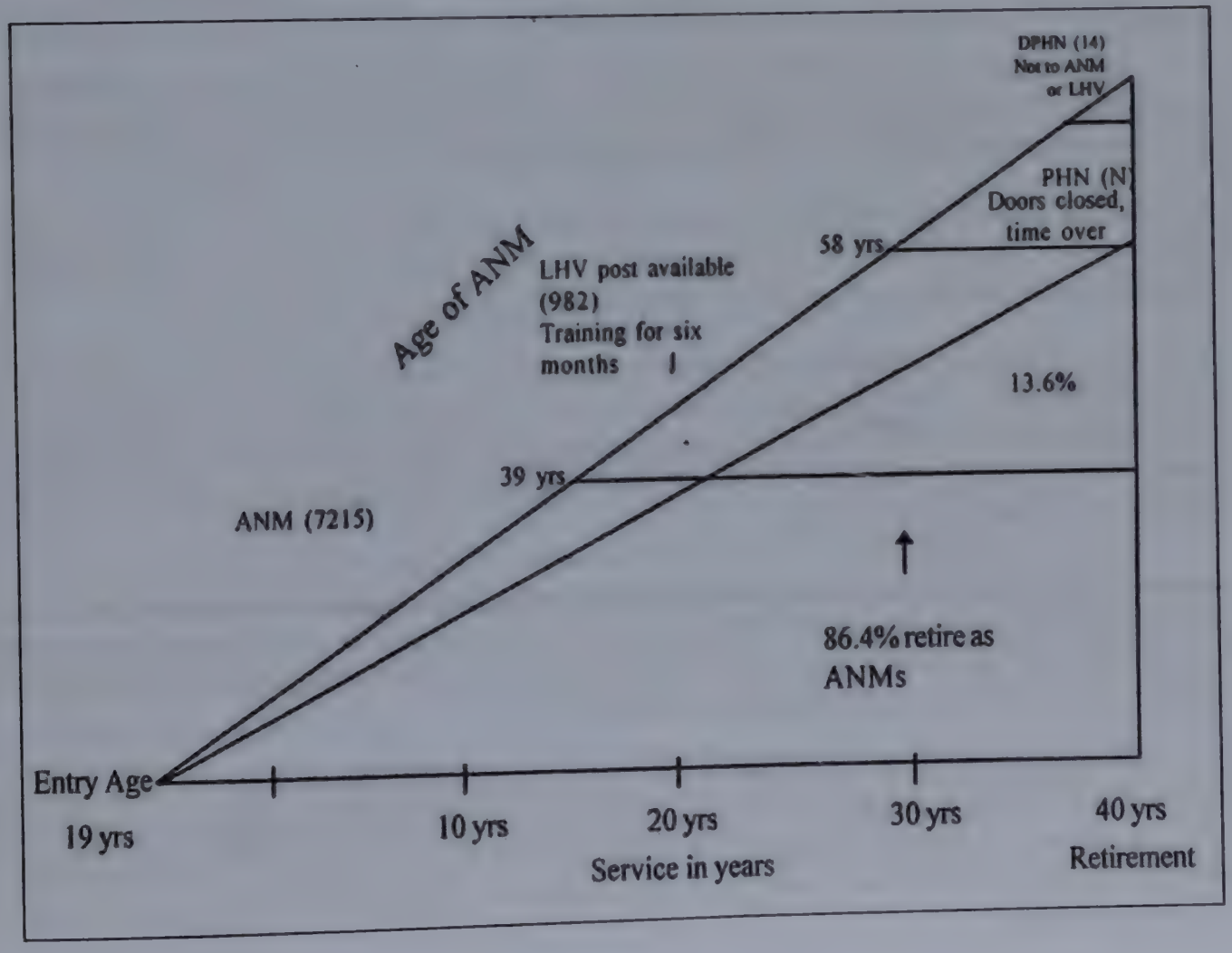
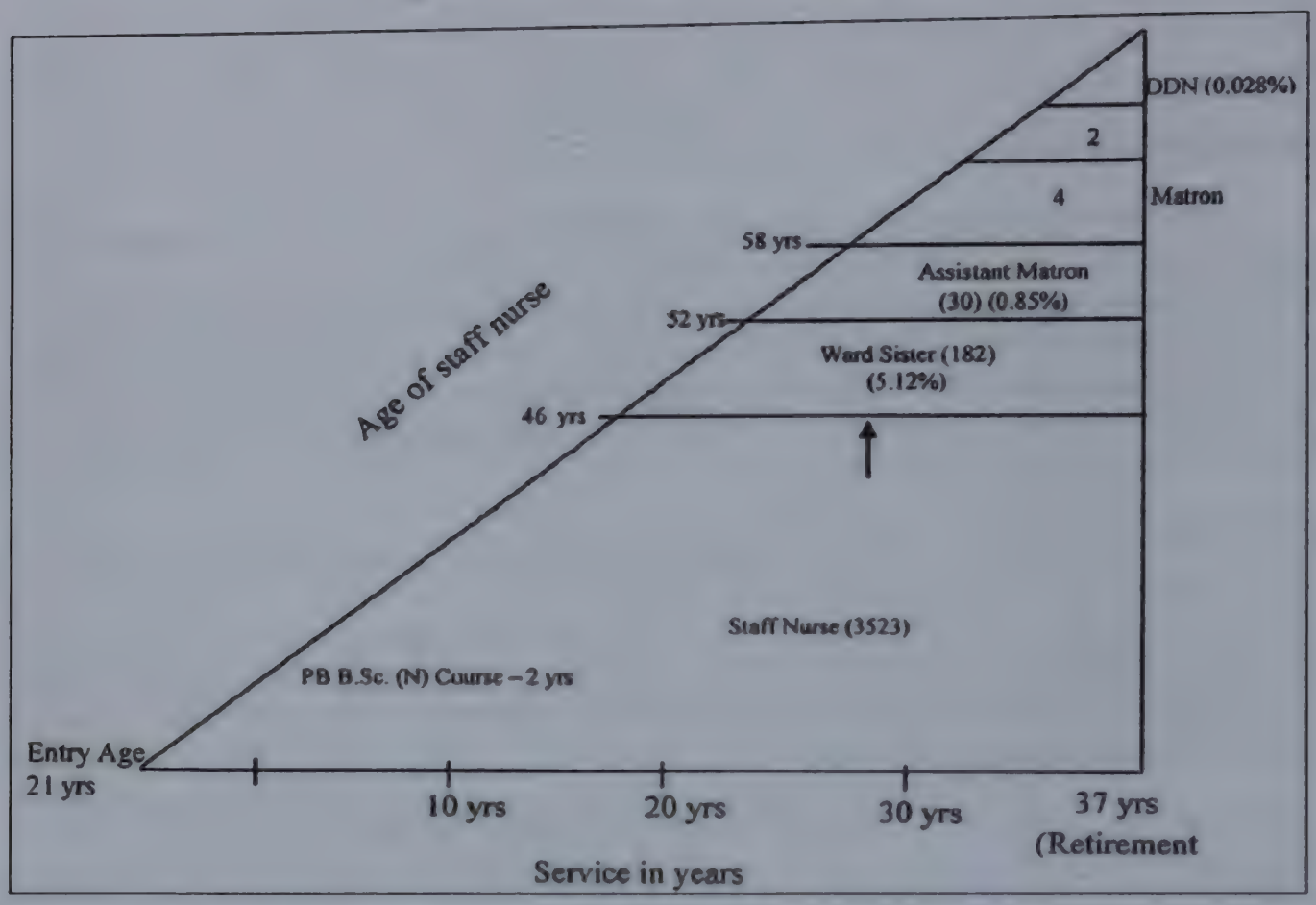


Figure 3. Career Paths - Staff Nurses



The state had 14 posts of DPHNO. The qualification for DPHNO is B.Sc. (Nursing) or Diploma in Public Health Nursing. The ANMs have very little scope to aspire for DPHNO posts. The PHN tutors and sister tutors of the nursing educational institutions possessing B.Sc. are eligible to be appointed as DPHNOs.

3.6.2 Existing career Path - Nurses: The minimum qualification to be a staff nurses is the three year diploma course in general nursing and midwifery and a six months internship programme. The staff nurses enter the Government service around 21 years of age. There are 3523 staff nurses in the Orissa state.

The staff nurses are entitled for study leave for higher qualifications after 5 years of service. At present 50 seats are available in the state as the College of Nursing at Berhampur is the only institute offering the Post Basic B.Sc. (Nursing). At present the other options such as DPHN, DNEA are not available. The diploma course in public health nursing, awarded to 121 nurses, was discontinued from 1999 and diploma course in nursing education was not started in Orissa state.

On completion of the Post Basic B.Sc., the nurses were granted two additional increments. There are no preferential promotions for the B.Sc. incumbents. The first promotional posts of head nurses are very minimal as there are 182 sanctioned posts of head nurses (5%) in the state. Thus the first promotion to the post head nurse is availed on completion of 25 to 28 years service as s staff nurse.

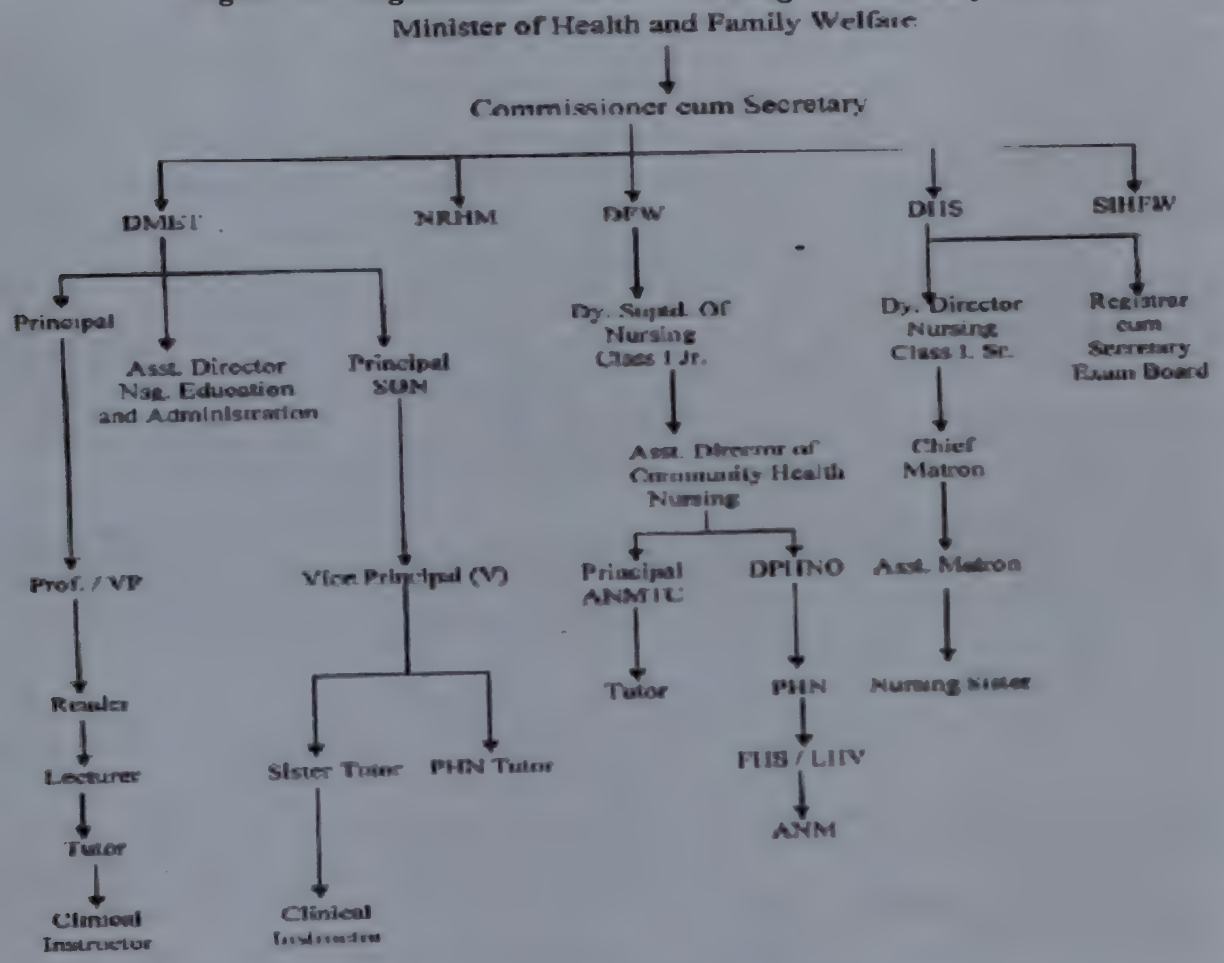
The next step on the career ladder for staff nurses is assistant Matron –there are only 30 posts in the entire state. Less than one percent staff nurses will reach this. Another six years (approximately) is required to reach this post and by this time the age of the staff nurse will be approximately 52-55 years and she will be nearing retirement. In another four years, if there are vacancies she may be promoted as matron. By this time the staff nurse would have retired.

Overall the career pathway for nursing personnel in Orissa is grim with too few promotional avenues and too many hurdles. Even those who have completed the next qualification such as LHV training and post-basic B.Sc. Nursing have not been promoted due to administrative delays and policy barriers.

3.7. Management and Administration of Nursing & Midwifery services

The existing organization chart of nursing in Orissa shown on page 37 indicates the low position of nursing in administration and policy matters. There are very few positions at Class One officer level for nurses, though the workforce they represent is massive. The highest positions at state level available to nurses are - Deputy Director of Nursing, Class I Senior, under DHS, Principal College of Nursing, Class I Senior, under DMET, Deputy Superintendent of Nursing (Class I Junior) under DFW, Assistant Director Community Health Nursing, Class II under DFW and Assistant Director of Nursing Education, Class II, under DMET.

Figure 10. Organization Chart - Nursing & Midwifery Services



Analysis of the management structure of nursing at state level reveals three main problems

There are very few positions at state level for undertaking management functions efficiently and many top management positions are vacant. For the massive workforce of more than 12000 nursing personnel in the state in government sector, there is only one DD nursing post at Class I. This post is vacant and the deputy superintendent of nursing is acting in-charge. Nursing administration is carried out by only three posts - deputy director of nursing, assistant director of community health nursing and assistant director of nursing education. The workload is heavy - administering educational programmes. It was observed that they work in crowded rooms and little assistance. They are overworked and frustrated.

Table XX: Nursing & Midwifery Staff in various Directorates

Category	Family Welfare	Health Service	Medical Education
ANMs	7215	-	-
LHVs	982	-	-
PHN (tutors)	3	-	-
DPHNs	14		
Staff Nurses	-	3523	-
Nursing sisters / Head Nurses	-	182	-
Assistant Matron	-	30	-
Matron	-	4	-
CNO / Chief Matron	-	1	
Principal			18 +1*
Reader	-	-	1
Lecturer	-	-	1
Clinical Instructor	-	-	6
Nursing Tutor	-	-	88
State Level Officer	-	1	2
Total	**8214**	**3740**	**117**

Most promotions at senior level are "acting or in-charge" giving the occupants very little administrative decision-making power or representation in policy making. There is a low level of leadership and capacity at the top to provide technical guidance and take up governance and management tasks related to nursing personnel. There is very little opportunity for capacity development. There is no cohesive nursing workforce working together on professionals. Nursing personnel are controlled by at least three medical directors.

Nursing personnel are distributed in three different streams in the medical and health department. All nursing personnel working in public health areas (ANMs, LHVs, PHNs, and DPHNs) numbering a total of 8214 are under the control of the Director of Family Welfare. The Deputy Superintendent of Nursing who is responsible for administration is posted as in-charge Deputy Director of Nursing. The administrative responsibility therefore falls on assistant director of community health nursing. Clinical nursing personnel from Staff Nurses to Chief Matron and the DDN (3740) are under the control of the Director of Health services. The administrative post of Deputy Director, Nursing is vacant and the officiating Dy. Superintendent of nursing, junior level to the principal of nursing college, is unable to implement policies for strengthening of nursing workforce. All the faculty of ANMTC, LHVTC, Schools of Nursing and College of Nursing (117) are under the Directorate of Medical Education and Training.

The educational background of nurses does not prepare them to tackle administrative issues. For example, they had not had opportunity to attend leadership or management courses, have not been prepared to write reports, make plans, monitoring programmes, meet the media, advocate with policy makers. Since their entry into service they have worked as team member, not as team leader. Even when they reach positions of leadership they hesitate to lead.

Currently, only one Class One Senior post in nursing is filled by a Nurse (the post of Principal, College of Nursing). But this is located at Berhampur and has specific responsibilities as the head of an institution and with responsibilities for merging educational programmes. Administrative matters and decisions are not being attended by nurses as the highest post in the state capital is not filled. Within the teaching hospitals, there are three sanctioned posts of Chief Matron at Class One Junior level. But, they are not dealing with day to day administration at state as they work large. In short, there are many management issues that need to be sorted out at the state administrative level before nursing can be strengthened.

3.8 Nursing services in Private Sector

The study of private sector itself is a massive task and this study of private sector was focused on two areas of nursing education, availability of nursing personnel and their perceptions. The findings of the visits to 11 private nursing educational institutions are detailed in Section Four. The research team attempts to study the private hospitals and interviews with nurses were successful in three hospitals. The research team visited eight private hospitals and most of the hospital authorities refused to allow interaction with nurses. Permission was obtained from three hospitals and interviews could be undertaken for 9 nurses (seven GNM and two B.Sc.) and one ANM. The findings are as below –

- Nursing staff in private hospitals were hesitant to provide any information about themselves or their working condition. Observation revealed the following issues.
- Not even half of the 'nurses' working in private hospitals are qualified nurses. Young girls and boys were trained for short period and used as nurses. One hospital owner expressed that "Three years is not necessary for nursing. Young girls or boys can be taught in one month to give injections and do dressings. They can also be taught to assist in surgery and do delivery."
- Pharmacists are utilised for nursing care as their salary costs are less.
- Recruitment was according to requirement. The candidates who approached the hospital were interviewed and appointed on contractual basis if they agreed to terms of work. They usually had a contract for one year. The hospitals did not advertise the posts because they needed only few persons.
- Nurses said they had job satisfaction because facilities were available of carrying out functions. Nurses had a nursing station and place to write, sit and work. Working conditions in the private hospitals were satisfactory because patients bought all the essential items for care.
- Salary of nurses was around Rs. 4000 as compared to Rs.6,000 for contractual nurse in Government.
- Nurses in private hospitals were satisfied with safety measures as expressed by the 10 nurses interviewed.
- Acute shortage of staff in private hospitals - one 80 bedded hospital is functioning with 10 staff nurses and nursing services are provided by pharmacists and others.
- Job insecurity and lack of opportunities for higher education.

An assessment of nursing personnel employed in private sector could not be done because there was no transparency whether persons working in private hospitals were qualified nurse. To gain a picture of the issue an assessment was made of private sector in one district - Bhadrak. Senior nursing homes were identified. The inpatients are managed by one full-time doctor, part time consultants and nursing care is being provided by few qualified nurses. Unqualified local youth were given hands on experience and assigned nursing duties.

Table-XXI : Nursing personnel in private sector (Bhadrak district) – case study

	Hospital	Beds	Services	Full time doctor	Qualified nurses	Others
1	Subham	10	Obst., Eye &Surgery	1 Eye specialist	Nil	Pharmacist& 4 others
2	Salandi	20	Obst.. & Surgery	1	4	NA
3	Padi	10	Obst. & Gynaec.	1	2	NA
4	Nayak	10	Obst. & Gynaec.	1	2	1
5	Nalini anto	10	General	1	-	1
6	Akhi	10	General		1	1
7	Apex	10	General	-	-	2 Pharmacist

The findings of this study showed that nurses with B.Sc. (Nursing) qualification are working in private hospital as they could not get employment in the Government sector.

Section- IV : Nursing Education - Capacities and Quality

4.1 Nursing & Midwifery Education

The Indian Nursing Council prescribes syllabi, sets standards, approves courses and regulates quality of nursing education in the Country. At present, there are three entry level nursing courses and several layers of post certificate, post diploma and post graduate courses. The three entry levels courses are ANM training for 18 months leading to a certificate, GNM training for 3 1/2 years leading to diploma, B.Sc. Nursing for 4 years leading to degree in nursing. Orissa has all three basic education courses. However the number of institutions of nursing education in Orissa is low compared to many states, especially in the case of basic and post-basic colleges of nursing and M.Sc. programme.

Table 22 : Nursing & Midwifery Educational Institutions in India & Orissa

	Course	India	Orissa	
			Nos.	%
1	ANM / MPHW (F) Certificate course (18 months) after X class	584	39	6.7
2	Diploma in General Nursing & Midwifery course (3 years) after XII class	1902	29	1.5
3	B.Sc. (Nursing) Degree course (4 years) after XII class	1155	12	1.0
4	Post Basic B.Sc. (Nursing) Degree course (2 years) Diploma course	129	1	0.8
5	M.Sc. (Nursing) PG course (2 years) after B.Sc. or/ Post Basic B.Sc.	237	1	0.4
	Total	3643	83	2.3

Except for the post-basic nursing and M.Sc. Nursing being conducted in the government college of nursing at Berhampur, Orissa does not have institutions offering higher level education either in government or private sector. The M.Sc. course was recently started and the first batch has completed their course. The diploma course in public health nursing was discontinued.

4.2 Development of Nursing & Midwifery Education

The missionary hospital at Berhampur (Zanana Hospital) established in 1900 was the first to start training course for nursing as early as 1905 and from 1926 the course was revised as three years course. This course was recognized by the Orissa Nursing Council from 1941and affiliated to Mid India Board from 1998. The nursing ANM schools were started at Berhampur in the year 1956.

Table 23 Nursing & Midwifery Institutions - Orissa

	Institution	Government	Others	Total
1	ANM Schools	16	23	39
2	LHV School	1	Nil	1
3	Nursing School	5	24	29
4	Nursing College (Post Basic B.Sc.)	1	Nil	1
5	Nursing College (B.Sc.)	1	11	12
6	Nursing College (M.Sc.)	1	Nil	1

At present, there are 39 ANM Schools. During the past 10 years, 51 ANM schools were started in private sector and several students were disallowed for examinations due to non-compliance with the standards.

The three nursing schools in Government sector are functioning at the medical colleges – Srirama Chandra Bhanja Medical College Hospital in Cuttack, Maharaja Krishna Chandra Gajapati Medical College in Berhampur, and Vira Surindra Sai Medical College Hospital at Burla. There are two nursing schools in public sector functioning from ISPAT General Hospital at Rourkela and Mahanadi Coalfield Hospital at Talcher in Denkanal district. In addition, four nursing schools are managed by NGOs at Christian Hospital, Berhampur; Catholic Mission Hospital, Nuagaon; Bissam Cuttack Mission Hospital, Rayagada; Jyoti Hospital, Balasore and 18 new nursing schools in private sector were opened recently.

Government Nursing College, Berhampur :

There is one nursing college in Government sector at Berhampur and 12 nursing colleges in private sector. The Berhampur nursing college was started in 1983 under Overseas Development Agency (UK) with diploma course in Public Health Nursing. The two year post-basic B.Sc. Nursing course was started in 1986 with annual intake of ten students and the intake was enhanced to 20 from the year 1996. The post basic B.Sc. course was discontinued during 1997 to 2000 due to derecognition by INC because of faculty shortages. During the year 1993-94, the four year course of B.Sc. (Nursing) was started with provision of contractual faculty. From the year 2003, the College is offering post basic B.Sc. (Nursing) distance education course of IGNOU with an annual intake of 30 students. The Diploma course in public health nursing was availed by 121 nurses. *The M.Sc. (Nursing)* course was started in 2006 and presently the annual intake is 10 in the four nursing specialties of medical, surgical, Obstetrics.& Gynecology Pediatrics and community Health. The first batch of the M.Sc. (Nursing) students passed out in 2008. Till December 2008, a total of 239 nursing diploma holders availed the facility for their graduation and 86 nurses qualified as nurses on completion of their Basic B.Sc..

The college has been facing many hurdles in its existence over the last 25 years - discontinuation of courses, extreme shortage of teachers, lack of financial support for courses from government, lack of deputation for higher education, non-absorption of graduates into higher posts, etc. Recently, education in this government college of nursing has become partly private since students of even B.Sc. programme have to pay fee and living expenses. According to the latest information the college of nursing is to be strengthened into a centre of excellence in nursing.

The one year Diploma in Public Health Nursing course was the first course started in 1983. This course with annual intake of 20 students for in-service candidates with diploma in General Nursing & Midwifery was the first post certificate training programme in Orissa. During 1983 to 1998, total of 121 nurses completed the DPHN course and the course was discontinued from 1999 as advised by the University.

The midwifery subject was earlier considered as a specialty and nurses were encouraged for the additional course of one year duration (subsequently reduced to six months). The course is now discontinued and the subject is incorporated in nursing syllabus as per INC guidelines. The candidates passed out from nursing schools are registered by the INC as midwives. The present ANM course was initially started as two years course of auxiliary to nursing with focus on maternal and child health and later condensed by INC as 18 months course.

4.3 Facilities in Nursing & Midwifery Institutions

The study team interacted with teachers and students in 19 institutions - 8 ANM schools (4 each in Government and private), 6 Nursing schools (3 each in Government and private) and 5 Nursing colleges (4 private). The findings are as detailed below –

	Govt. Training Centres	Private Training Centres
Class rooms	All are functioning in Government buildings. The classrooms are overcrowded, inadequately ventilated and furnished	Functioning in own and rented buildings. The schools visited are adequately furnished and well ventilated.
Library	Library facilities including seating accommodation are inadequate and librarians are not posted.	Library facilities including seating accommodation are inadequate and librarians are not posted.
Labs.	There is no exclusive midwifery lab. and female dummies are only available.	There is no exclusive midwifery lab. Female dummies, few organs and models available.
Teaching Aids and Faculty	Few charts are available. AV teaching aids such as OHP, LCD projectors and computer facilities are not available.	AV teaching aids such as OHP, LCD projectors and computer facilities are rarely available. Teaching is mainly by part time faculty due to non-availability of qualified faculty.
Hostel	In-campus hostels with furniture available but rooms insufficient. Toilets are inadequate and in poor condition.	Hostels or rented building with furniture available but rooms insufficient. Toilets are adequate

4.4 Faculty - Profiles, Perceptions and Practices:

Of the 45 faculty interviewed, 8 were postgraduates (M.Sc.) and 32 were graduates (18 B.Sc. and 14 Post Basic) and 8 possessed post GNM diploma certificates including five of them availing higher education facilitation as in-service candidates. The services of all the four deputed for higher education in midwifery are aptly utilised in the training institutions. Over 50% of the faculty had less than ten years' teaching experience and 8 only attended national conferences pertaining to their field.

The clinical procedures for antenatal and postnatal examinations, breast care, perineal care and child birth assistance are demonstrated in labs and subsequently in labour room. The delivery procedures in the labour rooms are demonstrated to the students by 33 of the 45 faculty. Half of faculty stated that demonstrations were given in baby resuscitation, kangaroo mother care, breast feeding and health education including home based care. 18 teachers were only demonstrating partograph plotting. The supervision of clinical procedures during the student's postings in antenatal and postnatal units was minimal as 14 teachers were involved on regular basis.

The student's evaluation was predominantly by internal class tests. Of the 45 teachers, 37 were deploying return demonstrations for skill evaluations, 35 were deploying case presentation modes and 28 out of 42 teachers encouraged seminars/ panel discussions.

4.5 Student's Perceptions:

The research team interviewed 155 students with 61 at ANM schools, 67 at nursing schools and 27 at nursing college. The final year/ semester students were interviewed as all of them have completed their postings in labour room and postnatal wards. All the 67 students from nursing schools had fulfilled the clinical postings as per the norms. In contrast, less than 50 of the students from ANM schools only completed their clinical postings in antenatal and postpartum/ sterilization wards. Similarly less than 50% of nursing college students have completed posting in postpartum / sterilisation wards.

Table XXIV. ANM school Student's performance

		ANM students (n= 61)		GNM students (n=67)		B.Sc. students (n=27)	
	Learning area	Under supervision	Indepen-dently	Under supervision	Indepen-dently	Under supervision	Indepen-dently
1	Conducting delivery	46	12	58	20	21	12
2	Antenatal examination	41	23	56	32	16	11
3	Postnatal care	34	24	51	39	18	16
4	Newborn resuscitation	52	18	52	23	22	9
5	Prevention of hypothermia	46	20	46	35	15	16
6	Immunization	43	25	57	30	18	15
7	IUD insertion	43	25	66	21	19	14

The training in practical skills is inadequate as majority were not confident in most of the requisite practical skills for maternal and child health care. 50% of the B.Sc. nursing students 33 % nursing school students and 25% of ANM school students only conducted minimum deliveries as many have just witnessed deliveries. Very few have performed episiotomy suturing (10), neonatal resuscitation or IUD insertion (20).

Many of the students were satisfied with theory classes. Majority of ANM and nursing school students were satisfied with clinical supervision and evaluation where as 50% of B.Sc. Nursing students were dissatisfied with the quality of supervision and evaluation for clinical postings.

In conclusion, it is evident that the nursing and midwifery education in Orissa is with wide range of lacunae - meager number of educational institutions, poor infrastructure and acute shortage faculty in the existing schools and colleges, inadequate clinical trainings and evaluation systems.

Section - V : Recommendations

The services of nurses and ANMs are essentially required at all the health facilities as well as for the preventive health care activities at the community level and nursing and midwifery educational institutions. The scope of work of nursing personnel is enormous. Orissa has 6688 health Sub-Health Centres, 1279 primary health centres, 231 community health centres, 22 sub district hospitals, 32 district headquarters hospitals, and three medical college hospitals. Besides the above, there are 16 ANM Training Centres, one LHV Training Centre, three Schools of Nursing, three Health and Family Welfare Training Centres, one Regional Training Centre and one College of Nursing. Nurses are required for the smooth functioning of each of these government health facilities and training institutions. In addition, there is significant growth of private health sector with additional requirements for trained nurses. In Orissa, there is acute shortage of nursing and midwifery human resources for the achievement of NRHM goals.

The Government of India recognises that the availability of human resources in rural areas is a serious challenge (Official Communication, GOI, 2006). The only solution is to encourage the selection, recruitment, training and placement of adequate nurses and ANMs by the states. In fact, it would be desirable to constitute a Nursing Cadre by all States, so that their selection, training, placement, career progression etc. for systematic implementation.

It is within this context that the assessment of nursing workforce in Orissa was undertaken by the Academy for Nursing Studies on behalf of the National Health Systems Resource Centre (NHSRC) in 2008-09 with the approval of Government of Orissa. The findings of the study provide the framework for addressing shortages and preparing an action plan to strengthen nursing and midwifery services in Orissa. Urgent action is required to address shortfalls and meet immediate needs and also prepare concrete action plans for preventing shortages, reducing discrepancies and inequities in the future. The nursing and midwifery workforce in Orissa is required for the three distinct areas of clinical nursing, community nursing and nursing education.

Key issues to be addressed:

- Acute shortages of nurses and ANMs
- Inadequacies in educational institutions and faculty
- Weak managerial structures for supervision of nurses and ANMs
- Lack of adequate promotional posts and delayed promotions

5.1 Shortages of Nursing and Midwifery personnel

The findings of the study revealed large shortfalls of ANMs, LHVs, PHNs and DPHNOs for public health services; staff nurses and head nurses for clinical services as well as shortages of faculty for the educational institutions.

Table XXV : Overall shortage of nursing personnel

	Nursing Personnel	Shortfall	Total shortfall
Health facilities	ANM	7799	19666
	LHV	297	
	PHN	231	
	DPHNO	50	
	Staff Nurse	10669	
	Head Nurse	417	
	Assistant Matron	96	
	Matron	107	
ANM, Nursing & LHV Schools	Principal (2) & Vice-Principal (3)	5	34
	Nursing Tutors	29	
Nursing College	Principal (1) & Vice-Principal (1)	1	23
	Reader /Associate Professor	3	
	Lecturers	5	
	Clinical Instructors	14	

5.2 Increasing Availability of ANMs:

ANMs are the most critical human resources for implementation of all preventive health care activities including maternal and child health care and other primary health care including first aid, treatment of minor ailments etc. The availability of ANMs is the most vital input for health systems and their availability need to be ensured by enhancing admission capacities in the existing ANM schools, strengthening of private ANM schools for quality turnout and starting of new ANM schools in the public sector. As per revised regulations of INC, ANM schools can be started at all health facilities with bed strengths of 30 and above.

The admission capacities in the existing 16 ANM schools of Government and Bissam Cuttack Mission Hospital can easily be enhanced with minor additional facilities and faculty. Further, 14 new ANM Schools can be started preferably in tribal areas such as Balangir, Nabarangpur, Rayagada, Malkangir, Kandhamal as the Sub-district hospital are available with 100- 150 bedded. The feasible options would enhance availability of ANMs as detailed in Table XXVI.

Table XXVI : Enhancement of ANMs availability

ANM Schools	No. of schools	Present Intake	Proposed Intake	Annual Output				Total
				2010	2011	2012	2013	2013
Existing Government ANM Schools	16	40	80	640	640	1280	1280	3840
NGO - Bissam Cuttack School	1	15	40	15	15	40	40	135
Private sector Schools	23	645	660	645	645	645	645	2580
Proposed new ANM schools Govt.	14	-	700	-	-	700	700	1400
Total	54	700	1465	1300	1325	2665	2665	7955

There are 51 ANM schools in the private sector and are mostly located in and around the state capital. The students in these schools were not permitted to appear for examination mainly due to non-compliance of INC standards regarding physical infrastructure and faculty. Many of these unqualified candidates are working in private sector. The issue of candidates from 51 private ANM schools could be resolved by inviting the representatives of these institutions for a discussion, identifying the gaps, implementing a bridge course to fill gaps, and allowing the students to appear for examination in consultation with the nursing council. This would provide 1500 additional ANMs even if only 30 candidates from each school qualify.

5.3 Increasing Availability of LHVs, PHNs and DPHNOs:

There is one LHV Training Center at Berhampur with infrastructure and faculty as per INC norms with an intake of 30 per year. In fact this is the only Centre in the state that does not have shortfall of teachers. The admission capacity of this Centre could be increased to 45 candidates. The six months trainings can be undertaken for two batches per year by fully utilizing the available infrastructure. This would enable availability of 360 LHVs by the year 2013 as detailed below-

Table XXVII : Enhancing LHVs

	Intake	Annual output				Total by 2013
		2010	2011	2012	2013	
LHV Training Centre, Berhampur	45 x 2 batches per year	90	90	90	90	360

The PHN posts are critical for the supervision of ANMs and LHVs for the implementation and monitoring of maternal and child care programme including immunisation and facilitate reduction of the maternal and child morbidity and mortality. The PHNs shortfall in the state is 231 as the posts have not been created even though the PHN course was the first course started at Berhampur and 121 candidates completed the course. The existing infrastructure at the Health and Family Welfare Training Centres can be utilised to undertake the one year DPHN course for the LHVs and ANMs with an annual admission capacity of 30 each. The 121 passed out candidates can also be relocated as DPHNOs after a short refreshing course.

5.4 Increasing Availability of Staff Nurses:

The enhancement of admission capacities in existing nursing institutions and opening of new nursing schools and colleges is the only way forward as the present annual intake of nursing schools is too meager and the requirements of 10,669 additional nurses can be fulfilled in 10 years.

- Annual intake in the two government nursing schools at Burla and Berhampur could be increased from the existing capacity of 45 (25+20) to 100 by strengthening of the physical structure (renovations) including hostel so as to facilitate output of 435 nurses by end of 2015.
- Annual intake of Cuttack nursing school be increased from 40 to 80 for output of 360 nurses by 2015.
- Annual intake of the public sector nursing school at Talcher can be doubled to 40 to ensure a total output of 420 nurses from the two public sector nursing schools.
- Annual intake at the four nursing schools managed by NGOs (Mission hospital in Cuttack, Berhampur, Nuagaon and Balasore) could be increased to 160 (40x4) so as to facilitate output of 930 by year 2015.
- Annual intake of 21 private nursing schools could be enhanced to 1200 to facilitate additional 6090 nurses by the year 2015.
- The State can take full advantage of relaxation of INC norms and grants from the Government of India and start 29 new nursing schools to provide one in each district. This would ensure local nurses being available in the districts. Each of these 29 new schools can be started with annual intake of 50 each.

The above measures would enable to provide the 12,405 additional nurses as detailed below-

Table XXVIII : Enhancing Availability of Nurses

	GNM Schools	Existing		Proposed Intake	Year wise Annual Out put						Total by 2015	
		No	Annual intake		2010	2011	2012	2013	2014	2015		
1	Government – Berhampur	1	25	50	25	25	25	50	50	50	225	795
2	Government – Burla	1	20	50	20	20	20	50	50	50	210	
3	Government - Cuttack	1	40	80	40	40	40	80	80	80	360	
4	IGH – Rourkela	1	40	40	40	40	40	40	40	40	240	240
5	NTS – Talcher	1	20	40	20	20	20	40	40	40	180	180
6	NGO – Berhampur, Cuttack & Nuagaon	1	20x3	40x3	60	60	60	120	120	120	540	750
7	NGO – Balasore	1	30	40	30	30	30	40	40	40	210	
8	Private sector	21	830	1200	830	830	830	1200	1200	1200	6090	6090
9	Government- New (1/district)	29	-	50x29	-	-	-	1450	1450	1450	1450	4350
	Total	57	1150	4420	1065	1065	1065	3070	1150	1150	1150	12405

5.5. Meeting the requirements of Supervisors (Head nurses & Matrons):

Orissa requires 297 head nurses, 100 assistant matrons and 120 matrons. The individual Interviews and FGDs with nurses indicated their dissatisfaction for non-availability of these supervisors for guidance and undue delays in promotions. There is an urgent need to compile the seniority lists and fill the existing vacancies of all supervisory posts and simultaneously take necessary steps to fill the vacancies arising on promotions.

5.6. Addressing Faculty Shortages:

The most critical issue of increasing availability of ANMs and nurses can only be met by ensuring adequate number of faculty at ANM schools, nursing schools and nursing colleges as per the INC requirements detailed in Table XXIX. There is no shortfall of nursing teachers in LHV training centre.

Table XXIX : Faculty Shortages ANM and Nursing Schools

	Institutions	Existing	New	Total	Required (INC)	Available	Shortfall
1	ANM schools	16	14	30	5 x 30 = 150	80	70
2	Nursing Schools	3	29	32	18 x 32 = 54	21	555
3	LHV school	1	0	1	4 x 1 = 4	5	-
	Total	20	43	63	730	106	625

- Posting of all available in-service B.Sc. (Nursing) graduates including IGNOU course at the schools.
- Recruit faculty from within the State and outside the state on contract for a duration of three to five years. For immediate need, recruit from West Bengal, Andhra Pradesh, Tamilnadu, Kerala Pondicherry etc.
- Enhance admission capacities for graduate and postgraduate (nursing) courses. Establish two new nursing colleges for post basic B.Sc. Nursing with annual intake of 50 each
- Depute eligible and willing in-service candidates for B.Sc. and M.Sc. courses to other States
- Increase admission capacity in the M.Sc. course in College of Nursing at Berhampur from 10 to 20..
- Start DNEA and DPHN courses in the existing three HFWTC and in one RTI. In-service nurses can be deputed for DNEA and DPHN course to other states (West Bengal).

Table XXX : Enhancing Availability of Faculty and Specialty Nurses

Course	Existing	Proposed	Intake 2009	Proposed intake	Candidates passing out					
					2009	2010	2011	2012	2013	Total
B.Sc. (Nursing)	1	2	20	30 x 3 = 90	20	20	20	90	90	240
PB B.Sc. (Nursing)	1	2	50	30 x 3 = 90	50	50	90	90	90	370
M.Sc. Nursing	1	-	10	20 x 1 = 20	10	10	20	20	20	80
Total	3	4	50	260	80	80	130	200	200	690

At present there is only one government College of Nursing in Orissa with an intake of 20 for the four year B.Sc. Nursing course and 20 for post-basic B.Sc. Nursing. In addition, 30 candidates are admitted to IGNOU post-basic B.Sc. Nursing. The intake of the existing college of nursing could be increased to 50 in B.Sc. Nursing and 30 in Post Basic B.Sc. Nursing. In addition, two new Colleges of Nursing could be started at the medical colleges in Cuttack and Burla presently having nursing schools. The faculty requirements would be 87 as detailed below in Table XXXI.

Table XXXI : . Faculty Shortfalls - Nursing Colleges

	Category	INC norms	Required faculty	Available	Shortfall
1	Principal	1	1 x 3 = 3	1	2
2	Vice Principal	1	1 x 3 = 3	-	3
3	Reader	5	5 x 3 = 15	1	14
4	Lecturer	7	7 x 3 = 21	1	20
5	Clinical Instructor	18	18 x 3 = 54	6	48
	Total	32	96	9	87

(INC norms– 1:10 – one teacher to ten students – with annual intake of 50 or less in B.Sc. (Nursing) and 30 or less in post basic B.Sc. Nursing and 10 or less M.Sc. Nursing).

Alternative options as short term measure in consultation with INC

i) Field based training for ANMs through mobile teams:

One DPHNO and two tutors may be identified and posted in tribal districts as a special initiative to train local tribal girls and others from local communities as ANMs with a contract to serve in the same community. An initial crash course may be provided for three months. The subsequent training may be given at CHCs and PHCs through identified clinical and field supervisors such as staff nurses, PHNs, LHVs. Working at CHCs or 24x7 PHCs and possessing adequate training skills. About six candidates could be assigned to each supervisor. The supervisors should necessarily deploy all the teaching protocols. On completion of entire syllabus, the trainees be examined and certified.

ii) Auxiliary nurses or Nursing Assistants for hospital based nursing care: This concept is in vogue even in developed countries. The X class pass candidates may be recruited and trained for three years for hand on clinical experience under the supervision of senior nurses at district hospitals, initially 10. The coordinators/ supervisors should undergo one month orientation training and faculty teams from Government nursing school should monitor and conduct examinations. The auxiliary nurses could be posted at CHCs and district hospitals.

5.7 Motivational Issues & Career Progression

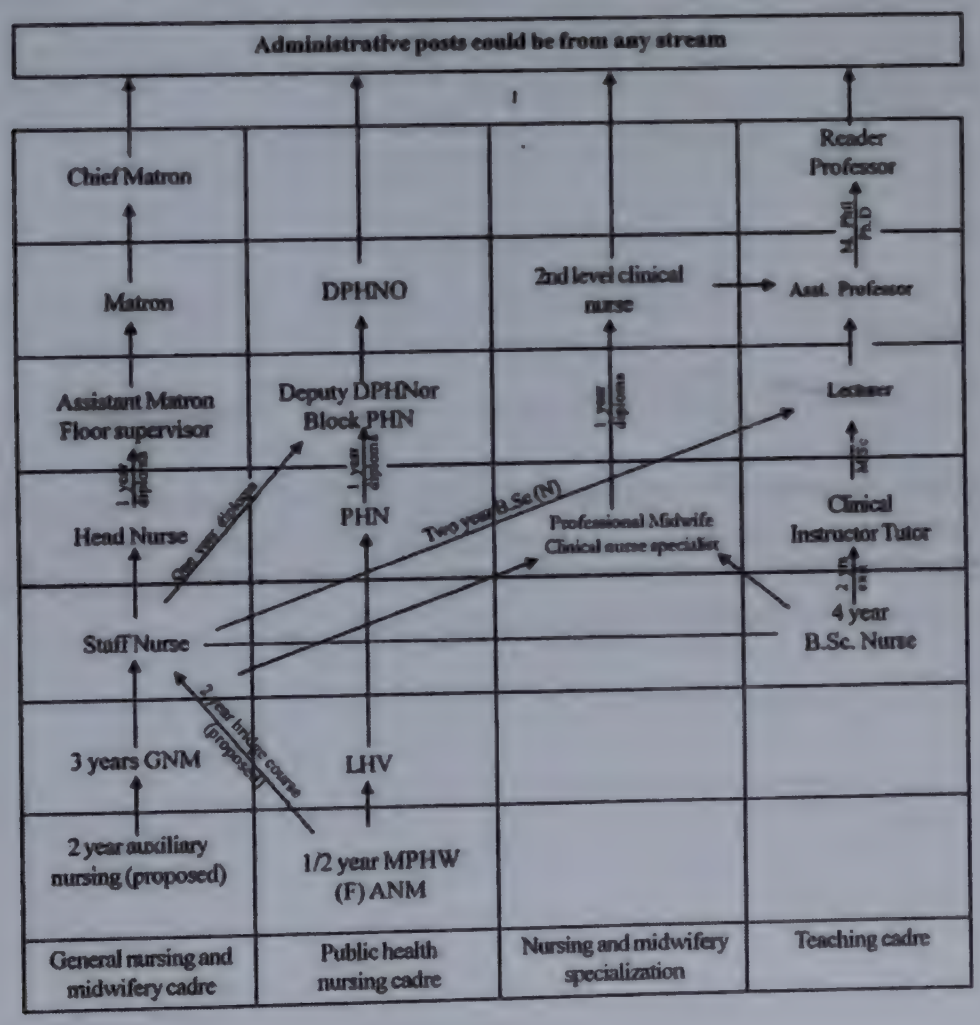
The service delivery can only be improved by enhancing the staff motivational levels largely depending upon individual career progressions. There is an immediate need for comprehensive career progression policies for nurses and ANMs including timely filling up supervisory level posts, assured career progressions (ACP), minimum of three promotions, time bound promotions and Lateral mobility amongst the clinical, public health and academic nursing areas at appropriate levels. The filling up of all vacant posts and creation of additional posts as per the IPHS norms would be the first step in this direction. The reservation of seats for higher studies, deputation of in-service candidates to other states for acquiring higher professional qualifications, appropriate posting of all in-service candidates with higher qualifications at educational institutions or in concerned specialty areas would all play key role in enhancing the morale of the nursing and midwifery personnel in the State.

The ANM have a very limited promotional avenue of becoming LHV as there is only one LHV training school with annual intake of 30 candidates. The second promotional posts of PHN (from LHV) are very few as the PHN posts are yet to be created. As most of the supervisory posts are vacant, the eligible staff nurses have been stagnating for long many years.

Motivation to move up the career ladder: An example
Mrs .Lakshmi entered service as a staff nurse after her diploma from nursing school in Orissa. Later she completed 2 years Post Basic B.Sc. (Nursing) from PGI, Chandigarh, completed her M.Sc. (Nursing) and also the highest professional qualification of doctorate (Ph.D.) from Karnataka State. She left the state service and presently working in Tamil Nadu as Principal of reputed College of Nursing.

Recommendations for career mobility: It is recommended that both the entry level posts of staff nurses and ANMs are provided for the four avenues of specialization in clinical fields, public health nursing, administration and academics as detailed below.

Figure 16. Recommended cadres and career pathways for nursing personnel



5.8 Strengthening of Management

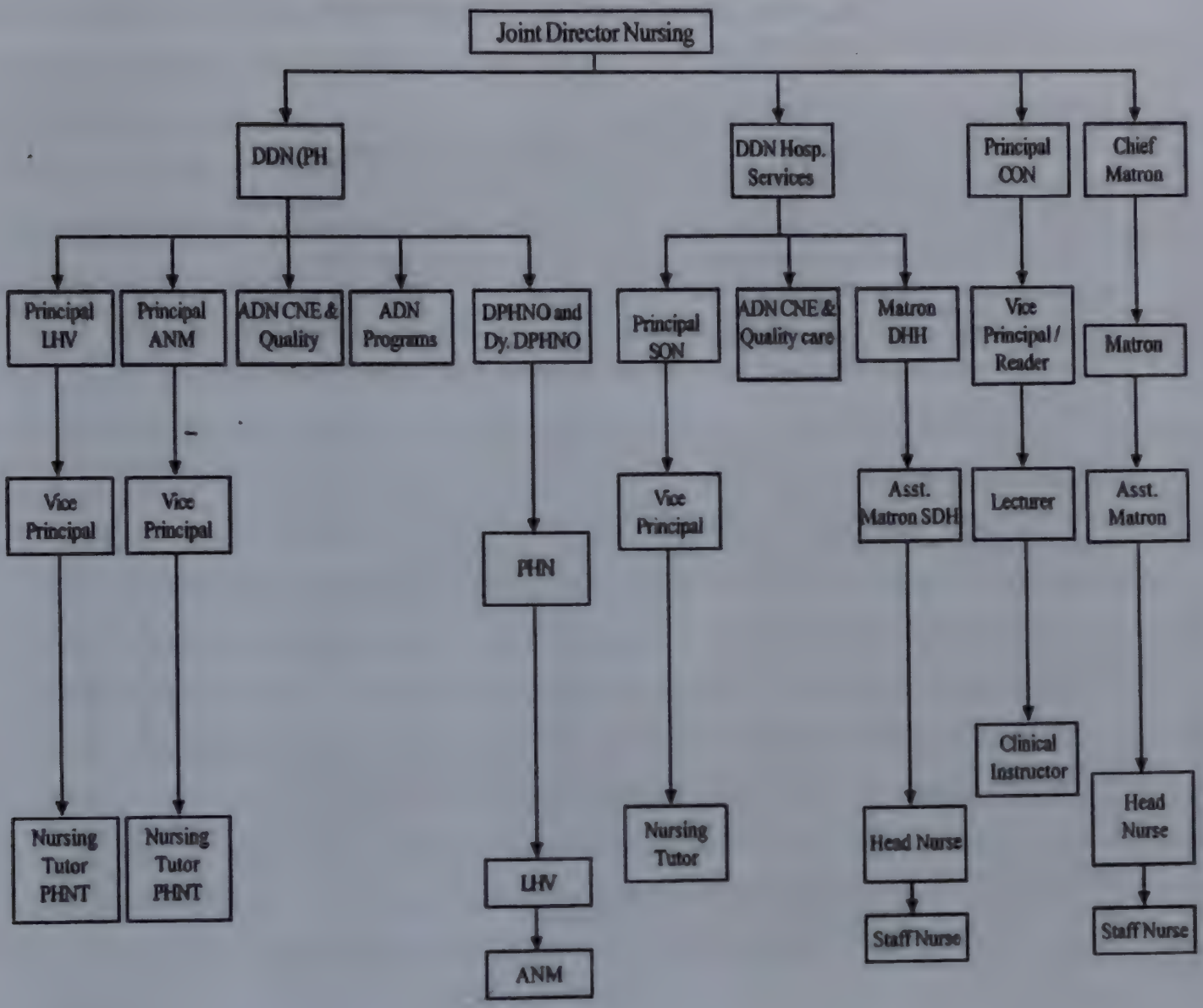
The nursing and midwifery services of acceptable quality can only be ensured with high intensity supervision with large pool of supervisors at various levels. The present hierarchy of nursing managerial positions is one Deputy Director Nursing post held as additional charge by the principal of Berhampur nursing college, 17 Principals and 3 Vice-Principals of ANM / Nursing schools, 5 Matrons (96% shortfall), 30 Assistant Matrons (76% shortfall) and 182 Head Nurses (70% shortfall), 14 DPHNOs (78% shortfall), 3 PHNs (99% shortfall) and 982 LHVs (23% shortfall).

At the State level, the posts of Joint Director, Deputy Directors, Assistant Directors are recommended as detailed below –

	Level	Posts
I	Senior Administrative	Joint Director (Nursing and Midwifery services)
II	Junior Administrative	Deputy Director - (Public Health Nursing), Deputy Director - (Education and Training), Principal – Nursing College, Chief Matrons – Medical College Hospitals
III	Senior Managerial	Assistant Director- Nursing (Health Programmes), Assistant Director (Education & Trainings), Assistant Director (Continuing Nursing Education & Quality), Principals of Nursing & ANM Schools, Vice-Principals of Nursing Colleges, Matrons of Hospitals and DPHNOs
IV	Senior supervisory	Head Nurses and PHNs
V	Junior Supervisory	LHVs, Nursing Tutors and Clinical Instructors
VI	Service Providers	Staff Nurses and ANMs

The suggested reorganization is summarized at Figure 17 is recommended to be implemented at the earliest with full complement of Joint Director Nursing as the nodal officer at the State level with the assistance of two Deputy Directors of Nursing and three Assistant Directors. The Chief Matrons, Matrons and Principals of Nursing Colleges will report to the Joint Director.

Figure 17 Suggested Organizational Chart of Nursing in Orissa



Schedule for Implementation of Action Plan

The action plan strategies include multi- pronged approaches of integrated into continuous consultative process and based on equity principles.

		Year - 1		Year - 2		Year-3	
1	**Addressing shortages of Nurses & ANMs**						
1.1	Constitute state level core group / committee and appoint nodal person	x					
1.2	Estimate requirements of nursing and midwifery personnel for present & future	x					
1.3	Identify present lacunae and develop action plan with implementation schedule for	x					
1.4	Assess requirements of new institutions and best alternatives for providing additional nurses and ANMs in shortest feasible time	x					
1.5	Recruitment from open market Within State (regular) outside State (contractual)	x	x				
1.6	Implement retention policies such as in-service trainings, promotions, emoluments on par with other States etc	x	x	x			
1.7	Make decision on fast tracking production - alternate models	x	x				
2	**Addressing Faculty shortages**						
2.1	Utillising in-service candidate possessing B.Sc., M.Sc., & Diploma in Public Health Nursing, Diploma in Nursing Education & Administration	x					
2.2	Deputation of in-service candidates to other States for Post basic B.Sc. (60), M.Sc. (10), DPHN (20) & DNEA (20)	x	x	x	x	x	x
2.3	Strengthening the in-house capacities – Enhance admission capacities for B.Sc. including IGNOU seats Start M.Sc. nursing courses -preferably for Post basic B.Sc.	x	x				
2.4	Long term strategies - Start additional two colleges and M.Sc. in two colleges		x	x	x	x	X
2.5	Recruitment Within State On regular basis& on Contractual (100) from outside	x	x				
2.6	Posting of eligible in-service candidates, recruitment, induction trainings, emoluments based on supply & demand	x	x	x			
3	**Strengthening of Nursing Educational Institutions**						
3.1	Strengthen Government ANM schools (17) as per INC norms for enhancing seats	x					
3.2	Pursue private sector ANM schools (51) for strengthening as per INC norms	x					
3.3	Pursue private sector institutions for enhancement of intake	x					
3.4	Strengthen Government nursing schools as per INC norms for extra seats	x					
3.5	Establish ANM & nursing schools in all districts - underserved & tribal areas	x	x				
3.6	Explore feasibility of starting ANM schools & nursing schools by PPP						
4	**Enhancing Quality in nursing & midwifery education**						
4.1	Reorientation trainings for existing faculty (one month)						
4.2	Induction trainings for teachers (1-3 months)	x					
4.3	Periodical review of clinical and community nursing training	x	x				
4.4	Accreditation of institutions for quality enhancement		x				
4.5	Strengthen State Nursing Council as per INC guidelines	x	x				
5	**Strengthening Management & Administrative capacities**						
5.1	Revise managerial structures for enhanced management & career progression	x					
5.2	Development of in three streams of Clinical Nursing including specialties, Public Health Nursing & Midwifery and Teaching faculty	x					
5.3	Nursing HR Management Information System	x					

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Strengthening of Nursing Services in Orissa
Study by N H S R C & ANS

Dissemination Workshop and Follow Up Decisions - 26th August 2009

The National Health Systems Resources (NHSRC), the Technical Assistance Group constituted by the National Rural Health Mission, facilitated a study on nursing human resources in Orissa at the behest of the Government of Orissa,. The Academy of Nursing Studies conducted the study and submitted the draft report including the action plan for consideration by the State Government and NHSRC. A workshop for dissemination of the final report and follow up action planning was held from 11AM to 1 PM on 26th August 2009 at the Secretariat, Government of Orissa. The meeting was chaired by the Principal Secretary (Health) as below:

1.	Ms. Anu Garg	Prinicpal Secretary (Health & Family Welfare),GOI of Orissa.
2.	Dr. P K Das	Director of Medical Education & Training, Orissa
3.	Dr. T. Sundararaman	Executive Director, National Health Systems Resources Centre
4.	Dr. D. Thamma Rao	Advisor-Public Health (Human Resources Division), NHSRC
5.	Dr. M. Prakassamma	Director, Academy of Nursing Studies
6.	Dr. Geetha Rana	Consultant, NHSRC
7.	Ms. Urmila Das	Registrar, State Nursing Council, Orissa
8.	Mr. Sushant Naik	State Facilitator, NHSRC, Orissa
9.	Mr. Bhuputra Panda	STC, Orissa
10.	Ms. Alison Demborath	TMST, Bhubaneshwar.

Presentation of Report :

The draft report of the study including the draft action Plan for the development of nursing services in Orissa State had been circulated earlier. Dr. Praksamma, Director, Academy of Nursing Studies presented the draft report of the study and briefly explained the objectives, present situation and the proposed action plan -

The NRHM envisages accessible health care by provision of nurses for 24x7 services at CHCs and PHCs and ANMs up to SHC levels. The nursing and midwifery study sample covered 68 facilities in the four selected districts of Bhadrak, Ganjam, Nabrangpur and Sambalpur. As part of the study, 438 persons were interviewed including 103 Staff Nurses, 45 ANMs,45 faculty and 155 students. The requirements are assessed as per the Indian Public Health Standards / Indian Nursing Council Norms / Government of India recommendations. The 30 % leave reserve requirements as per INC was however not included in the additional requirements. These requirements as calculated can be met with in next few years through remedial actions. The thrust areas of the proposed Action Plan are -

- Recruit immediately and at regular intervals to minimize the vacancies
- Posts to be sanctioned for all health facilities and training institutions as per the standards as over 1000
- newly qualified nurse are registered annually in the Orissa State
- Define nursing and midwifery cadres
- Develop career paths and ensure career progression
- Strengthen nursing management and State nursing council

Dr. Praksamma emphasized the need to filling up vacancies, sanctioning of additional posts required, quality in trainings and ensuring career paths providing adequate promotional avenues for the ANMs and staff nurses. She suggested for enhancing the intake of students at various institutions including LHV trainings, starting a bridge course for ANMs to enable them to become nurses and restarting of DPHN course. She further informed that the LHVs can be given brief training on appointment as PHNs.

Decisions

The Commissioner-cum-Secretary initiating the discussions, appreciated the key findings and recommendations of the study and solicited suggestions and responses from the participants. After a discussion the following decisions were taken :

1. The vacant posts of ANMs, LHVs, Staff nurses, Head Nurses etc should be filled on priority basis.

2. Sanction of posts as per requirements articulated under IPHS and even as was in existence earlier is the key constraint. Availability of candidates to fill many of these posts is relatively better than in other EAG states. Many of the posts, especially of the mid level nursing managers and supervisors have lapsed and they may have to be re-created. Others including most posts of staff nurses in PHCs and CHCs would be proposed for the first time. The posts required have been identified by this report and based on the information of what are existing posts the proposal could be made for the new posts to be created.

3. The NRHM provision of 2nd ANM at SHCs should be availed in concurrence with the Finance department for long-term sustenance. This represents a substantial opportunity to make use of available funds to reach nearer to the desired norms of human resource density that the system needs. In parallel all male health worker posts have to be filled and only as many 2nd ANMs would be sanctioned as there are male workers. Currently since there are 4100 male health workers the state could have that many 2nd ANMs in place. Defining the work distribution and relationships between the two ANMs would need some planned inputs. The suggestion is that the work programme for each be made such that on every day one ANM at least is available at the sub-center for mid-wifery services while the other is attending to the Village Health Nutrition Days and Immunisation activities to be conducted at Anganwadi Centres in coordination with ASHAs.

4. A career progression plan of ANMs to LHV, PHN and DPHNO should be implemented and the immediate step in this is to allow promotion of LHVs into PHNs after creating PHN posts as per IPHS norms and the filling up of all required LHV posts. A longer term approach to address shortages in remote rural areas is to allow for career development paths of ASHAs to the level of ANMs- without any reduction of training or standards needed.

5. The doubling of the seats in Nursing and ANM Schools is a feasible option with adequate support to provide the teachers and moderate development of physical infrastructure in the existing schools. Many schools have already done this, but the state needs to increase faculty to get the additional seats recognized.

6. M.Sc. qualified nurses and suitable candidates with B.Sc. should be posted at the training facilities and schools to fulfill the INC Norms so as to ensure good quality trainings by Government training facilities. The students completing M.Sc. (Nursing) from Nursing College should be appointed immediately.

7. The districts, especially more difficult districts should consider the way to build on the existing district cadre concept by more flexible recruitment and compensation. An HR agency to fill in vacancies through campus placement interviews or similar innovative methods should be explored.

8. The proposal of establishing the College of Excellence (COE), new nursing colleges, new ANM and GNM schools should be followed up and started up in a timeframe such that these facilities would take students from academic year 2010-2011 as the Government of India has approved in principle the Rs. 180 crore proposal for this purpose.

9. The DPHN course that has been discontinued could be recognized by the State Board as the University affiliation is not mandatory.

10. The CDMOs should visit the existing institutes in the NGO and private sectors and submit reports to the State in order to purse the institutions for fulfilling the minimum requirements of faculty and physical infrastructure and there by enhance the quality in training.

Subsequently, follow-up discussions were held with the State officials at the directorates medical education& training, health services and family welfare by the Advisor (NHSRC) and Director (ANS). The Director of Medical Education and Training detailed the positive steps taken by the State and assured that the necessary actions initiated for strengthening the nursing management structures at State level. Posts of three Assistant Directors and one post of Deputy Director will be made available for senior level nurses at the Directorate of Family Welfare, Directorate of Health Services and Directorate of Medical Education & Training with supportive staff. The director of family welfare will be cadre control officer for ANMs, LHVs and PHNs. The director of health services will be looking after all the nursing cadres working at PHCs, CHCs, Sub-district hospitals & district hospitals. The director of medical education & training will be cadre control authority for all nursing & midwifery staff at medical colleges and training institutions.

The State officials further assured actions for additional support for State nursing councils and State Board for improving quality in nursing & midwifery services. The Board could be strengthened by a team of HR professionals specialising in nursing management- who could directly report to the board or who could be lined to the SHSRC as a nursing management support unit. This team would help –

a. Ensure quality in the ANM schools and nursing schools in both public and private sector.

b. Faculty development programmes

c. Career development plans in consultation with key stakeholders and once consensus is reached facilitate their conversion into appropriate orders and their subsequent implementation.

d. Innovative recruitment and retention policies for nurses in difficult districts and remote areas of all districts.